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Wm. H. Morrison
EXCAVATION AND EMBANKMENT

TABLES;

APPLICABLE

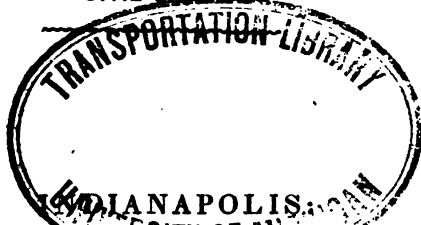
TO ALL WIDTHS OF ROAD BED,

AND ALL SLOPES:

CALCULATED FOR ALL DEPTHS LESS THAN 60 FEET.

~~~~~  
**BY WM. H. MORRISON,**

**CIVIL ENGINEER.**



**ELDER & HARRISS, STEAM PRESS PRINT.**

**1854.**



*James H. Smith*

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## INTRODUCTORY REMARKS.

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The following is a brief outline of the manner in which quantities are calculated by these tables.

The cross average of the side and center depths is first taken.

A method is pointed out of determining what amount of error is caused by taking the cross average as the end depth in any given case. Rules are also given for the correction of the cross average, if this is necessary. Thus the end depths may be obtained with any degree of accuracy that may be desired. In whatever way they are found, the tables for finding the solid contents are equally applicable. The solid contents may be obtained in two ways.

In calculating by the first method, the vertical distance at which the planes of the slopes produced, intersect each other above the roadway in embankment, or below it in excavation, is added to the actual depths.

The contents for these total depths are then taken from the tables for a slope of 2½ to 1. At the end of each section, this slope of 2½ to 1 is reduced to the actual slope by the use of the proper multiplier: and afterwards the solid contents of that portion lying above the roadway in embankment, or below it in excavation, which is contained between the roadway and the planes of the slopes produced are deducted at once for the whole length of the excavation or embankment in the section, which gives the actual number of cubic yards contained in the section.

In calculating by the second method, the quantities contained in the central part of the excavation or embankment, are kept separate throughout each section from those con-

tained in the slopes. The former are first found for a width of 10 feet; the latter for a slope of 2 $\frac{1}{2}$  to 1. The sums at the end of each section are then multiplied by the proper multipliers, which gives the actual amount of excavation and embankment in the section.

From the supplements to the tables for finding the solid contents, the quantities for any length less than 100 feet may be taken directly, whenever the depth of the mass is less than 20 feet, (if the calculation is made by the second method; and whenever the depth of the mass is less than 30 feet, if made by the first method) without multiplying or dividing in order to obtain these quantities from the contents of stations 100 feet long; and the corrections for the differences of the end depths are obtained in a similar manner whenever the difference of ends does not exceed 15 feet.

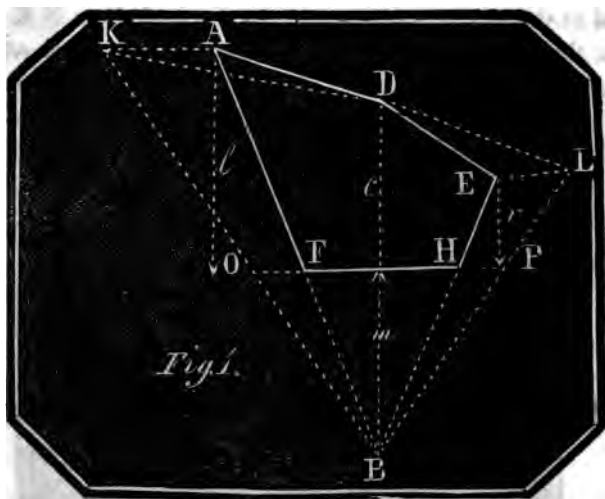
**WM. HENRY MORRISON.**

INDIANAPOLIS, March 26, 1853.

## EXPLANATIONS.

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**FIRST.** Of the method of finding the depths of end areas which are equal to the given end areas, and level at the top.

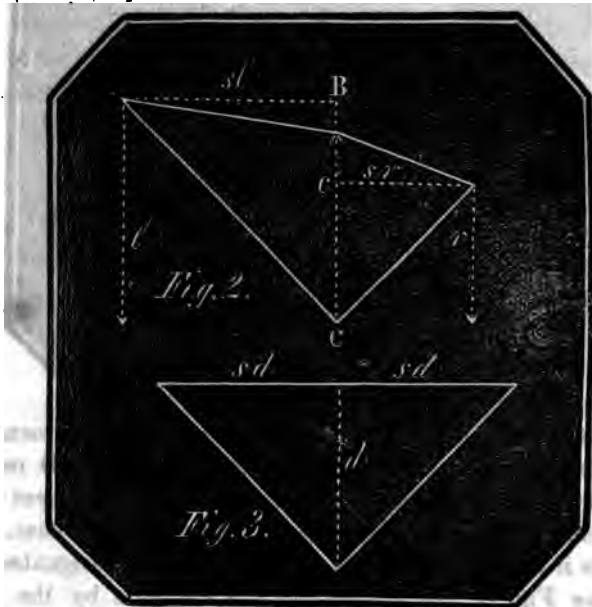


If the lines of slope in excavation or embankment be produced as shown in Fig. 1, (in which  $A F H E D$  represents the end area of an excavation) they will meet at a certain distance below the roadway in the former case, and above it in the latter. Let this distance be designated by  $m$  (see Fig. 1). In calculating the contents by the first method given,  $m$  is added to the actual depths.

The depths thus increased may be designated as the *total* depths.

We wish first to show that in any two given cases, where different slopes are used, if the *total* depths at the sides and

center are respectively equal, the *total* depths of the equivalent end areas, level at the top, will also be equal. Thus in Fig. 1, A F H E D and K O P L D representing the end areas of excavations which have different slopes; these slopes intersecting at B; and the total depths of cutting at the sides and center (measured from a horizontal line passing through B) being respectively equal; then if the area A B E D be reduced to an equivalent area, level at the top, lying between the lines of slope B A and B E, and the area K B L D be in like manner reduced to an equivalent area, level at the top, lying between the lines of slope B K and B L, the *total* depths of the areas, which are level at the top, will be equal.



In Fig. 2, let  
 $l$  = the *total* depth at the left side,  
 $c$  = " " " " centre,  
 $r$  = " " " " right side,  
 $s$  = a number which, multiplied by any *total* depth will give

the horizontal distance out, of the slope, at that depth measured from the vertical line B C\*, we shall have (Fig. 2) the

$$\text{end area} = \frac{s r c}{2} + \frac{s l c}{2} = \frac{s c (r+l)}{2} \quad (\text{Eq. 1.})$$

Again, let Fig. 3 represent an equivalent end area, level at the top, whose *total* depth we will designate by  $d$ ,  $s$  having the same value as before.\* We shall have the  $\text{end area} = s d^2$ . (Eq. 2.)

Substituting this value for the end area in Equation 1, we have

$$s d^2 = \frac{s c (r+l)}{2} \text{ hence } d^2 = \frac{c (r+l)}{2}$$

From this equation it is evident that the *total* depth of the equivalent end area, level at the top, depends solely for its value on the *total* depths at the sides and center, and not on the slope; and, therefore, if we find this total depth for one slope, for any given total depths at the sides and center, it will answer for any slope whatever.

By the following tables, the *total* end depths, whenever it is necessary to change the cross average, are found for a slope of 2 base to 1 perpendicular. They are obtained by correcting the cross average, or by another method which will be hereafter noticed.

**OF THE CORRECTION OF THE CROSS AVERAGE, WHEN THIS DOES NOT GIVE THE TRUE DEPTH.†**

We must first determine the amount of error occasioned by taking the cross average as the true end depth.

Having taken the differences separately between the center depth and each side depth, let the greater of these

---

|                                                           |                |                       |           |          |
|-----------------------------------------------------------|----------------|-----------------------|-----------|----------|
| * The value of $s$ is always indicated by the slope, thus |                |                       |           |          |
| For a slope of $1\frac{1}{2}$                             | base           | to one perpendicular, | - - - - - | $s=1.25$ |
| " "                                                       | $1\frac{1}{4}$ | " "                   | " "       | $s=1.5$  |
| " "                                                       | $1\frac{3}{4}$ | " "                   | " "       | $s=1.75$ |
| " "                                                       | 2              | " "                   | " "       | $s=2$    |

† The cross average is found by dividing the sum of the side depths plus twice the centre depth, by 4.]

two differences be represented by E, and the lesser difference by D.

If, now, we average the center with each side depth separately, it will be found, by drawing the figure, that the amount of area gained by thus averaging will be

$$= \frac{s(E^2 + D^2)}{8} \quad (\text{Eq. 3.})$$

If, again, we average the two depths thus obtained, it will be found, by drawing the figures, that *when both side depths are greater, or both less than the center depth*, the amount of area lost will be  $= \frac{s(E-D)^2}{16}$ .

Hence, the *total gain* in these cases will be

$$= \frac{s(E^2 + D^2)}{8} - \frac{s(E-D)^2}{16} = \frac{s(E+D)^2}{16} \quad (\text{Eq. 4.})$$

It will also be found that *in all other cases* the amount of area lost by the second average will be  $= \frac{s(E+D)^2}{16}$ .

Hence, the *total gain* in these cases will be

$$= \frac{s(E^2 + D^2)}{8} - \frac{s(E+D)^2}{16} = \frac{s(E-D)^2}{16} \quad (\text{Eq. 5.})$$

(For the further demonstration of this, see page 18.)

If we represent by  $v$  the quantity  $E+D$  in Eq. 4, and  $E-D$  in Eq. 5, we shall have, *total gain of area by cross averaging*,  $= \frac{s v^2}{16}$  (Eq. 6.) And in order to find the value of  $v$ , we have the following rule:

**RULE I.** Take the differences separately between the center and each side depth. Then, if both of the side depths are greater, or both less than the center depth, add these differences together (see Eq. 4.); in all other cases subtract one from the other (see Eq. 5.); the result is the value of  $v$ .

As before stated, the slope for which the total end depths are found by these tables, whenever the cross average is not sufficiently accurate, is that of 2 base to 1 perpendicular.

The value of  $s$  for this slope being 2, we have from Eq. 6—*gain of area by cross averaging*  $= \frac{v^2}{8}$ .

In order to find readily the end depths, two tables have been formed; Table 1 which contains the end areas in square feet, for a slope of 2 to 1, for each half tenth of a foot in depth, commencing with a depth of .025; and Table 2 which contains the values of  $\frac{v^2}{8}$  for each value of  $v$  from .1 up to 32 feet. Table 1 is carried to a depth of 71.9 feet.

To find the *total* depth of the equivalent end area, level at the top, when the cross average requires to be changed, we have the following rule:

**RULE II.** To the cross average add the value of  $m^*$  (see Fig. 1.). Find the depth in Table 1, which is nearest to their sum, and take from the table one of the areas next to that depth. Having obtained by Rule I. the value of  $v$ , subtract from the area taken from Table 1, the number found opposite the value of  $v$  in Table 2, and apply the remainder again to Table 1; observe between what areas in this table the remainder falls; opposite will be found the *total* depth of the end area, which is equivalent to the given end area, and level at the top.

When the value of  $v$  exceeds 32 feet, or when great accuracy is desired, the following method of finding the total end depths may be adopted. (See Eq. 1, from which, since in this case  $s=2$ , we shall have the *end area*  $=c(r+l)$ .)

**SECOND METHOD.** Multiply the sum of the side depths plus twice  $m$ , by the center depth plus  $m$ , and apply the product to Table 1. Observe between what areas this product falls; opposite will be found, as before, the total depth of the equivalent end area, level at the top.

The exact area may also be obtained from Table 1 by

---

\* The value of  $m$  is found by dividing half the width of the road bed by the value of  $s$ . Thus if the width of the road bed is 20 feet and the slope  $1\frac{1}{2}$  to 1, then  $m = \frac{10}{1.25} = 8$ .



using, together with the area taken from the column of areas, a proportionate part of the tabular difference taken from the column headed D.

*It will be remembered that the TOTAL end depths thus found are equally correct for all slopes and all widths of road bed, if we use in each case the proper value of  $m$ .*

If the end depths are found by the first method, it will not be necessary to change the cross average, unless when the cross average plus  $m$  is.....=3.0  $v=1.6$

|   |   |   |   |   |       |              |
|---|---|---|---|---|-------|--------------|
| " | " | " | " | " | ..... | 4.0 $v=1.9$  |
| " | " | " | " | " | ..... | 5.0 $v=2.1$  |
| " | " | " | " | " | ..... | 7.0 $v=2.4$  |
| " | " | " | " | " | ..... | 10.0 $v=2.9$ |
| " | " | " | " | " | ..... | 15.0 $v=3.5$ |
| " | " | " | " | " | ..... | 20.0 $v=4.1$ |
| " | " | " | " | " | ..... | 25.0 $v=4.5$ |
| " | " | " | " | " | ..... | 30.0 $v=5.0$ |
| " | " | " | " | " | ..... | 40.0 $v=5.7$ |
| " | " | " | " | " | ..... | 50.0 $v=6.4$ |

## MODE OF OBTAINING THE SOLID CONTENTS.

**FIRST METHOD.** In calculating by the first method, we use the *total* depths in all cases.

When they have not been found by Rule 2, add the value of  $m$  to the cross average in order to obtain them.

The total end depths of each mass are then added together and divided by 2.\* The contents for this average total depth are then taken, both in excavation and embankment, from Table 4 or its supplement, which are calculated for a slope of 2½ base to 1 perpendicular. In addition to the quantities thus obtained, a correction is required which varies according to the difference of the end depths, and

\* Where a transition is made from cut to fill, the *total* depth must be reckoned for excavation in one direction, and for embankment in the other.

the length of the mass; (this correction in cubic yards is  $= \frac{s l d^2}{324}$ \* in which  $s$ =slope,  $d$ =difference of end depths,  $l$ =length: all of these dimensions being in feet.) This correction is, in all cases to be *added* to the former amount, as the contents for the average of the end depths are less than the true amounts.

These corrections for a slope of  $2\frac{1}{2}$  to 1 are given in Table 5 and its supplement.

Having thus found the contents for a slope of  $2\frac{1}{2}$  to 1, this slope is reduced at the end of each section to the *actual* slope by using the proper multiplier. This multiplier is equal to  $s$  divided by 2.5, or equal to one-tenth of the number of quarters contained in  $s$ . For a slope of

|   |                         |                        |    |
|---|-------------------------|------------------------|----|
| 1 | base to 1 perpendicular | the multiplier is..... | .4 |
| 1 | “ 1 “ “ “               | .....                  | .5 |
| 1 | “ 1 “ “ “               | .....                  | .6 |
| 1 | “ 1 “ “ “               | .....                  | .7 |
| 2 | “ 1 “ “ “               | .....                  | .8 |

Having thus reduced the slope of  $2\frac{1}{2}$  to 1 to the actual slope, we must next remove the prism lying between the plane of the roadway and the planes of the slopes produced, for the whole length of excavation or embankment, as the case may be, in the section. If we designate this length in feet by  $L$ , the contents of the prism will be, in cubic yards,  $= \frac{s m^2 L}{27}$

To find the contents for the *total* depths for a slope of  $2\frac{1}{2}$  to 1, and for lengths of 100 feet, and to reduce this to the actual slopes, we have the following rule;

**RULE III.** Take from Table 4 the amount opposite the average of the *total* end depths, and also from Table 5 the amount opposite the difference of the end depths, placing the amounts for excavation and embankment in separate columns; and at the end of the section multiply their sums

\* See Gillespie on Roads and Railroads, page 327.

by the proper multipliers as before directed, in order to reduce the slope of  $2\frac{1}{2}$  to 1 to the slopes actually used.

If the length of the mass is less than 100 feet, a portion of the amounts contained in Tables 4 or 5, proportional to its length must be taken, instead of the full amounts.

For all depths less than 30 feet, and for all differences of ends less than 15 feet, the trouble of multiplying or dividing, in order to effect this, is saved by the supplements to Tables 4 and 5.

In these supplements the contents for lengths of 10 feet, 20 feet, 30 feet, &c., up to a length of 100 feet are given.

The contents for any length less than 10 feet are also easily obtained by mentally removing the decimal points one figure to the left. Thus, in the supplement to Table 4, for a depth of 7.2 feet, the contents for a length of 50 feet are 240 cubic yards, and by removing the decimal point one figure to the left, we find the contents for a length of 5 feet are 24 cubic yards.

When two quantities are taken from the same table, for a length less than 100 feet, it will be less trouble to write them separately in their proper column than to add them together when taken from the table: thus, if we wish to find the contents from the supplement to Table 4, for a depth of 11.5 and for a length of 84 feet;

|                                               |        |         |
|-----------------------------------------------|--------|---------|
| The contents for a length of 80 feet are..... | 979.60 | } cubic |
| “ “ “ “ 4 “ .....                             | 48.98  |         |

It will be found best to place the corrections taken from Table 5, or its supplement, in a separate column, instead of adding them to the contents for the average of the end depths.

**RULE IV.** Having obtained the quantities for a slope of  $2\frac{1}{2}$  to 1, and reduced this to the actual slope, as directed in Rule III.; deduct the prism lying between the roadway and the planes of the slopes produced, for the total length of the excavation or embankment in the section. (The contents of this prism, in cubic yards, are equal to the product

of  $m^2$  by the value of  $s$ ; multiplied by the length of excavation or embankment, as the case may be, in the section, divided by 27.) The remainder will be the actual number of cubic yards of excavation or embankment in the section.

Examples of this method of calculating are given on page 14. In these examples, when the length of the mass was considerable, the surface of the excavation, and the base of the embankment on each side of the centre line of the road, were made as slightly warped as possible; for no practicable method of calculation will give a true result if the surface of the ground is much warped. The remedy in such a case is to set additional intermediate stakes, so as to reduce the error to an inconsiderable amount. In the examples here given, the slope in excavation is 1½ to 1, and the width of road bed 20 feet; in embankment the slope is 1½ to 1, and the width of road bed 14 feet. The depths in excavation have the sign *plus*, those in embankment the sign *minus* prefixed to them. The value of  $m$  in excavation is 8; in embankment 4.67.

In calculating by this method, the lengths of the masses of excavation and embankment should be placed in separate columns, so that they can be easily added up at the end of the section.

For convenience in changing the cross average, (when that is sufficiently accurate,) to its corresponding *total* depth, it will be best to form a table in which are written in one column the actual depths, and opposite to them the sums of these actual depths plus  $m$ .

In all the tables for finding the solid contents, the quantities are given in cubic yards; and except in the supplements the length of the stations is taken at 100 feet.

| Station. | Len. of exc. | Len. of emb. | Left Depth. | Center Dp. | Right Depth. | Value of v. | Cross aver-<br>age. | Total End<br>Depths. | Diff. of End<br>Depths. | Length av-<br>erage. | EXCAVATION.                       |                                                          | EMBANKMENT.                       |                   |
|----------|--------------|--------------|-------------|------------|--------------|-------------|---------------------|----------------------|-------------------------|----------------------|-----------------------------------|----------------------------------------------------------|-----------------------------------|-------------------|
|          |              |              |             |            |              |             |                     |                      |                         |                      | Con'ts<br>for slope<br>of 24 to 1 | Correc-<br>tions.                                        | Con'ts<br>for slope<br>of 24 to 1 | Correc-<br>tions. |
| 0        |              |              | +56.0       | +80.0      | +34.0        | 70.0        | +62.5               | 68.3                 |                         |                      | 15337.9                           | 2351.1                                                   |                                   |                   |
| 1        | 100          |              | +4.2        | +8.8       | +0.2         | 13.2        | +5.5                | 13.1                 | 55.2                    | +40.7                | { 102.1<br>51.0                   | { 2.0<br>1.0                                             |                                   |                   |
|          | 15           |              | 0.0         | 0.0        | 0.0          | 0.0         | 0.0                 | { 8.0<br>4.67        | 5.1                     | +10.55               |                                   |                                                          |                                   |                   |
|          |              | 5            | 0.0         | -5.8       | -11.2        | 0.0         | -5.6                | 10.27                | 5.6                     | -7.47                |                                   |                                                          | 26.0                              | 1.2               |
| 2        | 80           |              | -25.0       | -60.0      | -95.0        | 0.0         | -60.0               | 64.67                | 54.4                    | -37.47               |                                   |                                                          | 10400.0                           | 1826.8            |
|          |              |              |             |            |              |             |                     |                      |                         |                      | 15491.0                           | 2354.1                                                   | 10426.0                           | 1828.0            |
|          |              |              |             |            |              |             |                     |                      |                         |                      | 2354.1                            |                                                          | 1828.0                            |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      | 17845.1                           |                                                          | 12254.0                           |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      | .5                                |                                                          | .6                                |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      | 8922.55                           |                                                          | 7352.40                           |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      | 340.7                             |                                                          | 102.9                             |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      |                                   | Deduct a-<br>mount ab.<br>road bed,                      |                                   |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      |                                   | Cubic yards<br>embankment<br>by prismoidal<br>formula... |                                   |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      | 8581.8                            |                                                          | 7249.5                            |                   |
|          |              |              |             |            |              |             |                     |                      |                         |                      | 8580.4                            |                                                          | 7248.3                            |                   |

Deduct amount below road bed,.....

Cubic yards excavation,.....

By prismoidal formula,.....

## SECOND METHOD OF OBTAINING THE SOLID CONTENTS.

In obtaining the solid contents by the second method, the actual end depths are used instead of the total depths. When the latter have been obtained by Rule II., the value of *m* is subtracted therefrom in order to obtain the former. The contents of the central part of the excavation or embankment are then obtained separately from those of the slopes.

**RULE V.** The contents of the slopes are obtained according to the directions given in Rule III., using the *actual* depths, instead of the *total* depths as there directed.

The true depth of the central portion is found by averaging the end depths. Its contents both in excavation and embankment are first found from Table 3, or its supplement, for a width of 10 feet, and at the end of each section, their sum is multiplied by a multiplier which will give the contents for the actual width. This multiplier is equal to one tenth of the width of road bed used.

|                                               |     |
|-----------------------------------------------|-----|
| For a width of 14 feet the multiplier is..... | 1.4 |
| " " 15 " " .....                              | 1.5 |
| " " 16 " " .....                              | 1.6 |
| " " 20 " " .....                              | 2.0 |
| " " 22 " " .....                              | 2.2 |
| " " 24 " " .....                              | 2.4 |

In calculating by this method, the contents of the central portion of the excavation or embankment must be kept separate from the contents of the slopes throughout each section. And in order to avoid adding the corrections in each instance to the quantities for the slopes, it is better to place them also in separate columns.

To find the contents for the central portion *for lengths of 100 feet*, we have the following rule:

**RULE VI.** Take from Table 3 the amount opposite the average of the end depths, placing the amounts for exca-

vation and embankment in separate columns; and at the end of the section multiply their sum by the proper multiplier as before directed.

When the length of the mass is less than 100 feet, the supplement to Table 3, which is made out for all depths less than 20 feet, is to be used in the same manner as the supplements to Tables 4 and 5 (see the explanations under Rule III.) The next page contains examples of this mode of calculating quantities, in which the widths of road bed and slopes are the same as those in the examples before given.

If the cross section is irregular, that is, if the surface line A D or D E (Fig. 1) is not straight, the end depth may be obtained thus: If we suppose A F and H E to be the actual slopes, and designate the actual end area plus the area F B H by  $a$ , and designate by  $A$  that area which for a slope of 2 to 1 would give the same total depth as the former, ( $s$  representing the actual slope used) we shall have

$$a : A :: s : 2$$

$$\text{hence, } A = \frac{2a}{s}$$

we shall have, then, the following rule:

**RULE VII.** If the cross section is irregular, calculate the true end area for the slope used, to which add the area of the triangle F B H, (Fig. 1) of which  $m$  is the altitude, and the width of road bed the base.

Multiply the sum of these areas by 2, and divide the product by the value of  $s$  used. Apply the result to Table 1 from which will be found the *total* depth. But if the solid contents are calculated by the second method given, the value of  $m$  must be subtracted from this *total* depth, in order to find the *actual* depth.

In taking estimates during the progress of the work, after summing up at the end of each section, the amounts (as given by the tables) which are *done*, they will be multiplied by the proper multipliers, as before directed, in order to obtain the actual number of cubic yards. And if the

EXPLANATIONS.

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| Station. | Length. | Left Depth. | Center Dep. | Right Depth. | Value of v. | Cross aver-<br>age. | True End<br>Depth. | Diff. of End<br>Depths. | Length av-<br>erage. | EXCAVATION.        |               |                                 | EMBANKMENT.        |         |                                 |
|----------|---------|-------------|-------------|--------------|-------------|---------------------|--------------------|-------------------------|----------------------|--------------------|---------------|---------------------------------|--------------------|---------|---------------------------------|
|          |         |             |             |              |             |                     |                    |                         |                      | Central<br>prisms. | Slopes.       | Correc-<br>tions for<br>slopes. | Central<br>prisms. | Slopes. | Correc-<br>tions for<br>slopes. |
| 0        | 1       | +56.0       | +80.0       | +34.0        | 70.0        | +62.5               | +60.3              |                         | +32.7                | 1211.11            | 9900.83       | 2351.11                         |                    |         |                                 |
| 1        | 100     | +4.2        | +8.8        | +0.2         | 13.2        | +5.5                | +5.1               | 55.2                    |                      | {9.30<br>4.63      | {5.80<br>2.89 | {2.01<br>1.00                   |                    |         |                                 |
| 2        | 15      | 0.0         | 0.0         | 0.0          | 0.0         | 0.0                 | 0.0                | 5.1                     | +2.55                |                    |               |                                 | 5.18               | 3.63    | 1.21                            |
| 3        | 5       | 0.0         | -5.6        | -11.2        | 0.0         | -5.6                | -5.6               | 5.6                     | -2.8                 |                    |               |                                 | 971.85             | 7969.18 | 1826.77                         |
| 4        | 80      | -25.0       | -60.0       | -95.0        | 0.0         | -60.0               | -60.0              | 54.4                    | -32.8                | 1225.04            | 9909.52       | 2354.12                         | 977.03             | 7972.81 | 1827.98                         |
|          |         |             |             |              |             |                     |                    |                         |                      |                    |               | 9909.52                         |                    |         | 7972.81                         |
|          |         |             |             |              |             |                     |                    |                         |                      |                    |               | 12263.64                        |                    |         | 9800.79                         |

3

$$1225.04 \times 2. = 2450.08$$

$$12263.64 \times .5 = 6131.82$$

$$977.03 \times 1.4 = 1367.84$$

$$9800.79 \times .6 = 5880.47$$

$$\text{Cubic yards Exc.} = 8581.90$$

$$\text{Cubic yards emb.} = 7248.31$$

$$\text{By prismoidal formula} = 8580.35$$

$$\text{By prismoidal formula} = 7248.32$$



second method of finding the solid contents is used, care must be taken to keep the amounts contained in the central part of the road, separate from those contained in the slopes.

Several tables of level cuttings, for each half foot in depth, designed for use in approximate estimates, are given on pages 114-117; the length of the stations being 100 feet, and the contents being given in cubic yards.

The contents, in cubic yards, of the solids to be deducted as directed in Rule IV., for various lengths, and for the same widths and slopes as the tables last mentioned, are given on pages 118 and 119.



## DEMONSTRATION REFERRED TO ON PAGE 8.

Let  $l$  (Fig. 2) represent the depth at the left side.

"  $r$  " " " " right side.  
"  $c$  " " " " center.

The cross average will be  $= \frac{2c+l+r}{4}$

The area, taking the cross average as the depth, is  
 $= s \left( \frac{2c+l+r}{4} \right)^2$ , see Fig. 3 and Eq. 2.

The *true* area is  $= \frac{s(c+l+r)}{2}$ , see Eq. 1 and Fig. 2. The gain of area, then, by taking the cross average as the depth, will be  $s \left( \frac{2c+l+r}{4} \right)^2 - \frac{s(c+l+r)}{2}$

Reducing this, and representing this gain by  $G$ , we have

$$G = \frac{s(4c^2 - 4cl - 4cr + 2lr + l^2 + r^2)}{16}$$

$$= \frac{s(c-r+c-l)^2}{16}$$

Designating the greater of these two differences  $c-r$

and  $c-l$  by  $E$ , and the lesser difference by  $D$ ; we have  

$$G = \frac{s(\pm E \pm D)^2}{16}$$

It is evident that  $E$  or  $D$  may be either positive or negative, or  $=0$ , according as  $c$  is greater or less than  $r$  or  $l$ , or equal to them.

1. If both  $E$  and  $D$  are positive, that is, if the center depth is greater than each of the side depths, we have  

$$G = \frac{s(E+D)^2}{16}$$

2. Or if both  $E$  and  $D$  are negative, (the centre depth being less than each of the side depths,) we shall have the same result.

3. If  $D=0$ , and  $E$  is positive, (the center depth being equal to one side depth, and greater than the other,) we have  $G = \frac{s E^2}{16}$

4. If  $D=0$ , and  $E$  is negative, (the centre depth being equal to one side depth, and less than the other,) we have, as in the third case,  $G = \frac{s E^2}{16}$

5. If  $E$  is positive and  $D$  negative, or if  $E$  is negative and  $D$  positive, (the center depth being greater than one of the side depths, and less than the other,) we have in either case  $G = \frac{s(E-D)^2}{16}$

In general, therefore, if the side depths are both greater or both less than the center depth, (cases 1 and 2) we have  

$$G = \frac{s(E+D)^2}{16}$$

And in all other cases, (we include cases 3 and 4, together with case 5, for the sake of uniformity in the rule, it being immaterial when  $D=0$ , whether we prefix the sign plus or minus to it,) we have  $G = \frac{s(E-D)^2}{16}$

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Area.</i> | <i>D.</i> | <i>Depths.</i> | <i>Area.</i> | <i>D.</i> |
|----------------|--------------|-----------|----------------|--------------|-----------|
|                |              |           | 2.0            | 7.80         | .40       |
| .05            | .00          | .01       | .05            | 8.20         | .41       |
| 0.1            | .01          | .02       | 2.1            | 8.61         | .42       |
| .15            | .03          | .03       | .15            | 9.03         | .43       |
| 0.2            | .06          | .04       | 2.2            | 9.46         | .44       |
| .25            | .10          | .05       | .25            | 9.90         | .45       |
| 0.3            | .15          | .06       | 2.3            | 10.35        | .46       |
| .35            | .21          | .07       | .35            | 10.81        | .47       |
| 0.4            | .28          | .08       | 2.4            | 11.28        | .48       |
| .45            | .36          | .09       | .45            | 11.76        | .49       |
| 0.5            | .45          | .10       | 2.5            | 12.25        | .50       |
| .55            | .55          | .11       | .55            | 12.75        | .51       |
| 0.6            | .66          | .12       | 2.6            | 13.26        | .52       |
| .65            | .78          | .13       | .65            | 13.78        | .53       |
| 0.7            | .91          | .14       | 2.7            | 14.31        | .54       |
| .75            | 1.05         | .15       | .75            | 14.85        | .55       |
| 0.8            | 1.20         | .16       | 2.8            | 15.40        | .56       |
| .85            | 1.36         | .17       | .85            | 15.96        | .57       |
| 0.9            | 1.53         | .18       | 2.9            | 16.53        | .58       |
| .95            | 1.71         | .19       | .95            | 17.11        | .59       |
| 1.0            | 1.90         | .20       | 3.0            | 17.70        | .60       |
| .05            | 2.10         | .21       | .05            | 18.30        | .61       |
| 1.1            | 2.31         | .22       | 3.1            | 18.91        | .62       |
| .15            | 2.53         | .23       | .15            | 19.53        | .63       |
| 1.2            | 2.76         | .24       | 3.2            | 20.16        | .64       |
| .25            | 3.00         | .25       | .25            | 20.80        | .65       |
| 1.3            | 3.25         | .26       | 3.3            | 21.45        | .66       |
| .35            | 3.51         | .27       | .35            | 22.11        | .67       |
| 1.4            | 3.78         | .28       | 3.4            | 22.78        | .68       |
| .45            | 4.06         | .29       | .45            | 23.46        | .69       |
| 1.5            | 4.35         | .30       | 3.5            | 24.15        | .70       |
| .55            | 4.65         | .31       | .55            | 24.85        | .71       |
| 1.6            | 4.96         | .32       | 3.6            | 25.56        | .72       |
| .65            | 5.28         | .33       | .65            | 26.28        | .73       |
| 1.7            | 5.61         | .34       | 3.7            | 27.01        | .74       |
| .75            | 5.95         | .35       | .75            | 27.75        | .75       |
| 1.8            | 6.30         | .36       | 3.8            | 28.50        | .76       |
| .85            | 6.66         | .37       | .85            | 29.26        | .77       |
| 1.9            | 7.03         | .38       | 3.9            | 30.03        | .78       |
| .95            | 7.41         | .39       | .95            | 30.81        | .79       |
|                | 7.80         | .40       |                | 31.60        | .80       |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 4.0            | 31.60         | .80       | 6.0            | 71.40         | 1.20      |
| .05            | 32.40         | .81       | .05            | 72.60         | 1.21      |
| 4.1            | 33.21         | .82       | 6.1            | 73.81         | 1.22      |
| .15            | 34.03         | .83       | .15            | 75.03         | 1.23      |
| 4.2            | 34.86         | .84       | 6.2            | 76.26         | 1.24      |
| .25            | 35.70         | .85       | .25            | 77.50         | 1.25      |
| 4.3            | 36.55         | .86       | 6.3            | 78.75         | 1.26      |
| .35            | 37.41         | .87       | .35            | 80.01         | 1.27      |
| 4.4            | 38.28         | .88       | 6.4            | 81.28         | 1.28      |
| .45            | 39.16         | .89       | .45            | 82.56         | 1.29      |
| 4.5            | 40.05         | .90       | 6.5            | 83.85         | 1.30      |
| .55            | 40.95         | .91       | .55            | 85.15         | 1.31      |
| 4.6            | 41.86         | .92       | 6.6            | 86.46         | 1.32      |
| .65            | 42.78         | .93       | .65            | 87.78         | 1.33      |
| 4.7            | 43.71         | .94       | 6.7            | 89.11         | 1.34      |
| .75            | 44.65         | .95       | .75            | 90.45         | 1.35      |
| 4.8            | 45.60         | .96       | 6.8            | 91.80         | 1.36      |
| .85            | 46.56         | .97       | .85            | 93.16         | 1.37      |
| 4.9            | 47.53         | .98       | 6.9            | 94.53         | 1.38      |
| .95            | 48.51         | .99       | .95            | 95.91         | 1.39      |
| 5.0            | 49.50         | 1.00      | 7.0            | 97.30         | 1.40      |
| .05            | 50.50         | 1.01      | .05            | 98.70         | 1.41      |
| 5.1            | 51.51         | 1.02      | 7.1            | 100.11        | 1.42      |
| .15            | 52.53         | 1.03      | .15            | 101.53        | 1.43      |
| 5.2            | 53.56         | 1.04      | 7.2            | 102.96        | 1.44      |
| .25            | 54.60         | 1.05      | .25            | 104.40        | 1.45      |
| 5.3            | 55.65         | 1.06      | 7.3            | 105.85        | 1.46      |
| .35            | 56.71         | 1.07      | .35            | 107.31        | 1.47      |
| 5.4            | 57.78         | 1.08      | 7.4            | 108.78        | 1.48      |
| .45            | 58.86         | 1.09      | .45            | 110.26        | 1.49      |
| 5.5            | 59.95         | 1.10      | 7.5            | 111.75        | 1.50      |
| .55            | 61.05         | 1.11      | .55            | 113.25        | 1.51      |
| 5.6            | 62.16         | 1.12      | 7.6            | 114.76        | 1.52      |
| .65            | 63.28         | 1.13      | .65            | 116.28        | 1.53      |
| 5.7            | 64.41         | 1.14      | 7.7            | 117.81        | 1.54      |
| .75            | 65.55         | 1.15      | .75            | 119.35        | 1.55      |
| 5.8            | 66.70         | 1.16      | 7.8            | 120.90        | 1.56      |
| .85            | 67.86         | 1.17      | .85            | 122.46        | 1.57      |
| 5.9            | 69.03         | 1.18      | 7.9            | 124.03        | 1.58      |
| .95            | 70.21         | 1.19      | .95            | 125.61        | 1.59      |
|                | 71.40         | 1.20      |                | 127.20        | 1.60      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
|                | 127.20        | 1.60      |                | 199.00        | 2.00      |
| 8.0            | 128.80        | 1.61      | 10.0           | 201.00        | 2.01      |
| .05            | 130.41        | 1.62      | .05            | 203.01        | 2.02      |
| 8.1            | 132.03        | 1.63      | 10.1           | 205.03        | 2.03      |
| .15            | 133.66        | 1.64      | .15            | 207.06        | 2.04      |
| 8.2            | 135.30        | 1.65      | 10.2           | 209.10        | 2.05      |
| .25            | 136.95        | 1.66      | .25            | 211.15        | 2.06      |
| 8.3            | 138.61        | 1.67      | 10.3           | 213.21        | 2.07      |
| .35            | 140.28        | 1.68      | .35            | 215.28        | 2.08      |
| 8.4            | 141.96        | 1.69      | 10.4           | 217.36        | 2.09      |
| .45            | 143.65        | 1.70      | .45            | 219.45        | 2.10      |
| 8.5            | 145.35        | 1.71      | 10.5           | 221.55        | 2.11      |
| .55            | 147.06        | 1.72      | .55            | 223.66        | 2.12      |
| 8.6            | 148.78        | 1.73      | 10.6           | 225.78        | 2.13      |
| .65            | 150.51        | 1.74      | .65            | 227.91        | 2.14      |
| 8.7            | 152.25        | 1.75      | 10.7           | 230.05        | 2.15      |
| .75            | 154.00        | 1.76      | .75            | 232.20        | 2.16      |
| 8.8            | 155.76        | 1.77      | 10.8           | 234.36        | 2.17      |
| .85            | 157.53        | 1.78      | .85            | 236.53        | 2.18      |
| 8.9            | 159.31        | 1.79      | 10.9           | 238.71        | 2.19      |
| .95            | 161.10        | 1.80      | .95            | 240.90        | 2.20      |
| 9.0            | 162.90        | 1.81      | 11.0           | 243.10        | 2.21      |
| .05            | 164.71        | 1.82      | .05            | 245.31        | 2.22      |
| 9.1            | 166.53        | 1.83      | 11.1           | 247.53        | 2.23      |
| .15            | 168.36        | 1.84      | .15            | 249.76        | 2.24      |
| 9.2            | 170.20        | 1.85      | 11.2           | 252.00        | 2.25      |
| .25            | 172.05        | 1.86      | .25            | 254.25        | 2.26      |
| 9.3            | 173.91        | 1.87      | 11.3           | 256.51        | 2.27      |
| .35            | 175.78        | 1.88      | .35            | 258.78        | 2.28      |
| 9.4            | 177.66        | 1.89      | 11.4           | 261.06        | 2.29      |
| .45            | 179.55        | 1.90      | .45            | 263.35        | 2.30      |
| 9.5            | 181.45        | 1.91      | 11.5           | 265.65        | 2.31      |
| .55            | 183.36        | 1.92      | .55            | 267.96        | 2.32      |
| 9.6            | 185.28        | 1.93      | 11.6           | 270.28        | 2.33      |
| .65            | 187.21        | 1.94      | .65            | 272.61        | 2.34      |
| 9.7            | 189.15        | 1.95      | 11.7           | 274.95        | 2.35      |
| .75            | 191.10        | 1.96      | .75            | 277.30        | 2.36      |
| 9.8            | 193.06        | 1.97      | 11.8           | 279.66        | 2.37      |
| .85            | 195.03        | 1.98      | .85            | 282.03        | 2.38      |
| 9.9            | 197.01        | 1.99      | 11.9           | 284.41        | 2.39      |
| .95            | 199.00        | 2.00      | .95            | 286.80        | 2.40      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 12.0           | 286.80        | 2.40      | 14.0           | 390.60        | 2.80      |
| .05            | 289.20        | 2.41      | .05            | 393.40        | 2.81      |
| 12.1           | 291.61        | 2.42      | 14.1           | 396.21        | 2.82      |
| .15            | 294.03        | 2.43      | .15            | 399.03        | 2.83      |
| 12.2           | 296.46        | 2.44      | 14.2           | 401.86        | 2.84      |
| .25            | 298.90        | 2.45      | .25            | 404.70        | 2.85      |
| 12.3           | 301.35        | 2.46      | 14.3           | 407.55        | 2.86      |
| .35            | 303.81        | 2.47      | .35            | 410.41        | 2.87      |
| 12.4           | 306.28        | 2.48      | 14.4           | 413.28        | 2.88      |
| .45            | 308.76        | 2.49      | .45            | 416.16        | 2.89      |
| 12.5           | 311.25        | 2.50      | 14.5           | 419.05        | 2.90      |
| .55            | 313.75        | 2.51      | .55            | 421.95        | 2.91      |
| 12.6           | 316.26        | 2.52      | 14.6           | 424.86        | 2.92      |
| .65            | 318.78        | 2.53      | .65            | 427.78        | 2.93      |
| 12.7           | 321.31        | 2.54      | 14.7           | 430.71        | 2.94      |
| .75            | 323.85        | 2.55      | .75            | 433.65        | 2.95      |
| 12.8           | 326.40        | 2.56      | 14.8           | 436.60        | 2.96      |
| .85            | 328.96        | 2.57      | .85            | 439.56        | 2.97      |
| 12.9           | 331.53        | 2.58      | 14.9           | 442.53        | 2.98      |
| .95            | 334.11        | 2.59      | .95            | 445.51        | 2.99      |
| 13.0           | 336.70        | 2.60      | 15.0           | 448.50        | 3.00      |
| .05            | 339.30        | 2.61      | .05            | 451.50        | 3.01      |
| 13.1           | 341.91        | 2.62      | 15.1           | 454.51        | 3.02      |
| .15            | 344.53        | 2.63      | .15            | 457.53        | 3.03      |
| 13.2           | 347.16        | 2.64      | 15.2           | 460.56        | 3.04      |
| .25            | 349.80        | 2.65      | .25            | 463.60        | 3.05      |
| 13.3           | 352.45        | 2.66      | 15.3           | 466.65        | 3.06      |
| .35            | 355.11        | 2.67      | .35            | 469.71        | 3.07      |
| 13.4           | 357.78        | 2.68      | 15.4           | 472.78        | 3.08      |
| .45            | 360.46        | 2.69      | .45            | 475.86        | 3.09      |
| 13.5           | 363.15        | 2.70      | 15.5           | 478.95        | 3.10      |
| .55            | 365.85        | 2.71      | .55            | 482.05        | 3.11      |
| 13.6           | 368.56        | 2.72      | 15.6           | 485.16        | 3.12      |
| .65            | 371.28        | 2.73      | .65            | 488.28        | 3.13      |
| 13.7           | 374.01        | 2.74      | 15.7           | 491.41        | 3.14      |
| .75            | 376.75        | 2.75      | .75            | 494.55        | 3.15      |
| 13.8           | 379.50        | 2.76      | 15.8           | 497.70        | 3.16      |
| .85            | 382.26        | 2.77      | .85            | 500.86        | 3.17      |
| 13.9           | 385.03        | 2.78      | 15.9           | 504.03        | 3.18      |
| .95            | 387.81        | 2.79      | .95            | 507.21        | 3.19      |
|                | 390.60        | 2.80      |                | 510.40        | 3.20      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>D.pths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 16.0           | 510.40        | 3.20      | 18 0           | 648.20        | 3.60      |
| .05            | 513.60        | 3.21      | .05            | 649.80        | 3.61      |
| 16.1           | 516.81        | 3.22      | 18.1           | 653.41        | 3.62      |
| .15            | 520.03        | 3.23      | .15            | 657.03        | 3.63      |
| 16.2           | 523.26        | 3.24      | 18.2           | 660.66        | 3.64      |
| .25            | 526.50        | 3.25      | .25            | 664.30        | 3.65      |
| 16.3           | 529.75        | 3.26      | 18.3           | 667.95        | 3.66      |
| .35            | 533.01        | 3.27      | .35            | 671.61        | 3.67      |
| 16.4           | 536.28        | 3.28      | 18.4           | 675.28        | 3.68      |
| .45            | 539.56        | 3.29      | .45            | 678.96        | 3.69      |
| 16.5           | 542.85        | 3.30      | 18.5           | 682.65        | 3.70      |
| .55            | 546.15        | 3.31      | .55            | 686.35        | 3.71      |
| 16.6           | 549.46        | 3.32      | 18.6           | 690.06        | 3.72      |
| .65            | 552.78        | 3.33      | .65            | 693.78        | 3.73      |
| 16.7           | 556.11        | 3.34      | 18.7           | 697.51        | 3.74      |
| .75            | 559.45        | 3.35      | .75            | 701.25        | 3.75      |
| 16.8           | 562.80        | 3.36      | 18.8           | 705.00        | 3.76      |
| .85            | 566.16        | 3.37      | .85            | 708.76        | 3.77      |
| 16.9           | 569.53        | 3.38      | 18.9           | 712.53        | 3.78      |
| .95            | 572.91        | 3.39      | .95            | 716.31        | 3.79      |
| 17.0           | 576.30        | 3.40      | 19.0           | 720.10        | 3.80      |
| .05            | 579.70        | 3.41      | .05            | 723.90        | 3.81      |
| 17.1           | 583.11        | 3.42      | 19.1           | 727.71        | 3.82      |
| .15            | 586.53        | 3.43      | .15            | 731.53        | 3.83      |
| 17.2           | 589.96        | 3.44      | 19.2           | 735.36        | 3.84      |
| .25            | 593.40        | 3.45      | .25            | 739.20        | 3.85      |
| 17.3           | 596.85        | 3.46      | 19.3           | 743.05        | 3.86      |
| .35            | 600.31        | 3.47      | .35            | 746.91        | 3.87      |
| 17.4           | 603.78        | 3.48      | 19.4           | 750.78        | 3.88      |
| .45            | 607.26        | 3.49      | .45            | 754.66        | 3.89      |
| 17.5           | 610.75        | 3.50      | 19.5           | 758.55        | 3.90      |
| .55            | 614.25        | 3.51      | .55            | 762.45        | 3.91      |
| 17.6           | 617.76        | 3.52      | 19.6           | 766.36        | 3.92      |
| .65            | 621.28        | 3.53      | .65            | 770.28        | 3.93      |
| 17.7           | 624.81        | 3.54      | 19.7           | 774.21        | 3.94      |
| .75            | 628.35        | 3.55      | .75            | 778.15        | 3.95      |
| 17.8           | 631.90        | 3.56      | 19.8           | 782.10        | 3.96      |
| .85            | 635.46        | 3.57      | .85            | 786.06        | 3.97      |
| 17.9           | 639.03        | 3.58      | 19.9           | 790.03        | 3.98      |
| .95            | 642.61        | 3.59      | .95            | 794.01        | 3.99      |
|                | 646.20        | 3.60      |                | 798.00        | 4.00      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 20.0           | 798.00        | 4.00      | 22.0           | 965.80        | 4.40      |
| .05            | 802.00        | 4.01      | .05            | 970.20        | 4.41      |
| 20.1           | 806.01        | 4.02      | 22.1           | 974.61        | 4.42      |
| .15            | 810.03        | 4.03      | .15            | 979.03        | 4.43      |
| 20.2           | 814.06        | 4.04      | 22.2           | 983.46        | 4.44      |
| .25            | 818.10        | 4.05      | .25            | 987.90        | 4.45      |
| 20.3           | 822.15        | 4.06      | 22.3           | 992.35        | 4.46      |
| .35            | 826.21        | 4.07      | .35            | 996.81        | 4.47      |
| 20.4           | 830.28        | 4.08      | 22.4           | 1001.28       | 4.48      |
| .45            | 834.36        | 4.09      | .45            | 1005.76       | 4.49      |
| 20.5           | 838.45        | 4.10      | 22.5           | 1010.25       | 4.50      |
| .55            | 842.55        | 4.11      | .55            | 1014.75       | 4.51      |
| 20.6           | 846.66        | 4.12      | 22.6           | 1019.26       | 4.52      |
| .65            | 850.78        | 4.13      | .65            | 1023.78       | 4.53      |
| 20.7           | 854.91        | 4.14      | 22.7           | 1028.31       | 4.54      |
| .75            | 859.05        | 4.15      | .75            | 1032.85       | 4.55      |
| 20.8           | 863.20        | 4.16      | 22.8           | 1037.40       | 4.56      |
| .85            | 867.36        | 4.17      | .85            | 1041.96       | 4.57      |
| 20.9           | 871.53        | 4.18      | 22.9           | 1046.53       | 4.58      |
| .95            | 875.71        | 4.19      | .95            | 1051.11       | 4.59      |
| 21.0           | 879.90        | 4.20      | 23.0           | 1055.70       | 4.60      |
| .05            | 884.10        | 4.21      | .05            | 1060.30       | 4.61      |
| 21.1           | 888.31        | 4.22      | 23.1           | 1064.91       | 4.62      |
| .15            | 892.53        | 4.23      | .15            | 1069.53       | 4.63      |
| 21.2           | 896.76        | 4.24      | 23.2           | 1074.16       | 4.64      |
| .25            | 901.00        | 4.25      | .25            | 1078.80       | 4.65      |
| 21.3           | 905.25        | 4.26      | 23.3           | 1083.45       | 4.66      |
| .35            | 909.51        | 4.27      | .35            | 1088.11       | 4.67      |
| 21.4           | 913.78        | 4.28      | 23.4           | 1092.78       | 4.68      |
| .45            | 918.06        | 4.29      | .45            | 1097.46       | 4.69      |
| 21.5           | 922.35        | 4.30      | 23.5           | 1102.15       | 4.70      |
| .55            | 926.65        | 4.31      | .55            | 1106.85       | 4.71      |
| 21.6           | 930.96        | 4.32      | 23.6           | 1111.56       | 4.72      |
| .65            | 935.28        | 4.33      | .65            | 1116.28       | 4.73      |
| 21.7           | 939.61        | 4.34      | 23.7           | 1121.01       | 4.74      |
| .75            | 943.95        | 4.35      | .75            | 1125.75       | 4.75      |
| 21.8           | 948.30        | 4.36      | 23.8           | 1130.50       | 4.76      |
| .85            | 952.66        | 4.37      | .85            | 1135.26       | 4.77      |
| 21.9           | 957.03        | 4.38      | 23.9           | 1140.03       | 4.78      |
| .95            | 961.41        | 4.39      | .95            | 1144.81       | 4.79      |
|                | 965.80        | 4.40      |                | 1149.60       | 4.80      |



TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
|                | 1149.60       | 4.80      | 26.0           | 1349.40       | 5.20      |
| 24.0           | 1154.40       | 4.81      |                | 1354.60       | 5.21      |
| .05            | 1159.21       | 4.82      | .05            | 1359.81       | 5.22      |
| 24.1           | 1164.03       | 4.83      | 26.1           | 1365.03       | 5.23      |
| .15            | 1168.86       | 4.84      | .15            | 1370.26       | 5.24      |
| 24.2           | 1173.70       | 4.85      | 26.2           | 1375.50       | 5.25      |
| .25            | 1178.55       | 4.86      | .25            | 1380.75       | 5.26      |
| 24.3           | 1183.41       | 4.87      | 26.3           | 1386.01       | 5.27      |
| .35            | 1188.28       | 4.88      | .35            | 1391.28       | 5.28      |
| 24.4           | 1193.16       | 4.89      | 26.4           | 1396.56       | 5.29      |
| .45            | 1198.05       | 4.90      | .45            | 1401.85       | 5.30      |
| 24.5           | 1202.95       | 4.91      | 26.5           | 1407.15       | 5.31      |
| .55            | 1207.86       | 4.92      | .55            | 1412.46       | 5.32      |
| 24.6           | 1212.78       | 4.93      | 26.6           | 1417.78       | 5.33      |
| .65            | 1217.71       | 4.94      | .65            | 1423.11       | 5.34      |
| 24.7           | 1222.65       | 4.95      | 26.7           | 1428.45       | 5.35      |
| .75            | 1227.60       | 4.96      | .75            | 1433.80       | 5.36      |
| 24.8           | 1232.56       | 4.97      | 26.8           | 1439.16       | 5.37      |
| .85            | 1237.53       | 4.98      | .85            | 1444.53       | 5.38      |
| 24.9           | 1242.51       | 4.99      | 26.9           | 1449.91       | 5.39      |
| .95            | 1247.50       | 5.00      | .95            | 1455.30       | 5.40      |
| 25.0           | 1252.50       | 5.01      | 27.0           | 1460.70       | 5.41      |
| .05            | 1257.51       | 5.02      | .05            | 1466.11       | 5.42      |
| 25.1           | 1262.53       | 5.03      | 27.1           | 1471.53       | 5.43      |
| .15            | 1267.56       | 5.04      | .15            | 1476.96       | 5.44      |
| 25.2           | 1272.60       | 5.05      | 27.2           | 1482.40       | 5.45      |
| .25            | 1277.65       | 5.06      | .25            | 1487.85       | 5.46      |
| 25.3           | 1282.71       | 5.07      | 27.3           | 1493.31       | 5.47      |
| .35            | 1287.78       | 5.08      | .35            | 1498.78       | 5.48      |
| 25.4           | 1292.86       | 5.09      | 27.4           | 1504.26       | 5.49      |
| .45            | 1297.95       | 5.10      | .45            | 1509.75       | 5.50      |
| 25.5           | 1303.05       | 5.11      | 27.5           | 1515.25       | 5.51      |
| .55            | 1308.16       | 5.12      | .55            | 1520.76       | 5.52      |
| 25.6           | 1313.28       | 5.13      | 27.6           | 1526.28       | 5.53      |
| .65            | 1318.41       | 5.14      | .65            | 1531.81       | 5.54      |
| 25.7           | 1323.55       | 5.15      | 27.7           | 1537.35       | 5.55      |
| .75            | 1328.70       | 5.16      | .75            | 1542.90       | 5.56      |
| 25.8           | 1333.86       | 5.17      | 27.8           | 1548.46       | 5.57      |
| .85            | 1339.03       | 5.18      | .85            | 1554.03       | 5.58      |
| 25.9           | 1344.21       | 5.19      | 27.9           | 1559.61       | 5.59      |
| .95            | 1349.40       | 5.20      | .95            | 1565.20       | 5.60      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 28.0           | 1565.20       | 5.60      | 30.0           | 1797.00       | 6.00      |
| .05            | 1570.80       | 5.61      | .05            | 1803.00       | 6.01      |
| 28.1           | 1576.41       | 5.62      | 30.1           | 1809.01       | 6.02      |
| .15            | 1582.03       | 5.63      | .15            | 1815.03       | 6.03      |
| 28.2           | 1587.66       | 5.64      | 30.2           | 1821.06       | 6.04      |
| .25            | 1593.30       | 5.65      | .25            | 1827.10       | 6.05      |
| 28.3           | 1598.95       | 5.66      | 30.3           | 1833.15       | 6.06      |
| .35            | 1604.61       | 5.67      | .35            | 1839.21       | 6.07      |
| 28.4           | 1610.28       | 5.68      | 30.4           | 1845.28       | 6.08      |
| .45            | 1615.96       | 5.69      | .45            | 1851.36       | 6.09      |
| 28.5           | 1621.65       | 5.70      | 30.5           | 1857.45       | 6.10      |
| .55            | 1627.35       | 5.71      | .55            | 1863.55       | 6.11      |
| 28.6           | 1633.06       | 5.72      | 30.6           | 1869.66       | 6.12      |
| .65            | 1638.78       | 5.73      | .65            | 1875.78       | 6.13      |
| 28.7           | 1644.51       | 5.74      | 30.7           | 1881.91       | 6.14      |
| .75            | 1650.25       | 5.75      | .75            | 1888.05       | 6.15      |
| 28.8           | 1656.00       | 5.76      | 30.8           | 1894.20       | 6.16      |
| .85            | 1661.76       | 5.77      | .85            | 1900.36       | 6.17      |
| 28.9           | 1667.53       | 5.78      | 30.9           | 1906.53       | 6.18      |
| .95            | 1673.31       | 5.79      | .95            | 1912.71       | 6.19      |
| 29.0           | 1679.10       | 5.80      | 31.0           | 1918.90       | 6.20      |
| .05            | 1684.90       | 5.81      | .05            | 1925.10       | 6.21      |
| 29.1           | 1690.71       | 5.82      | 31.1           | 1931.31       | 6.22      |
| .15            | 1696.53       | 5.83      | .15            | 1937.53       | 6.23      |
| 29.2           | 1702.36       | 5.84      | 31.2           | 1943.76       | 6.24      |
| .25            | 1708.20       | 5.85      | .25            | 1950.00       | 6.25      |
| 29.3           | 1714.05       | 5.86      | 31.3           | 1956.25       | 6.26      |
| .35            | 1719.91       | 5.87      | .35            | 1962.51       | 6.27      |
| 29.4           | 1725.78       | 5.88      | 31.4           | 1968.78       | 6.28      |
| .45            | 1731.66       | 5.89      | .45            | 1975.06       | 6.29      |
| 29.5           | 1737.55       | 5.90      | 31.5           | 1981.35       | 6.30      |
| .55            | 1743.45       | 5.91      | .55            | 1987.65       | 6.31      |
| 29.6           | 1749.36       | 5.92      | 31.6           | 1993.96       | 6.32      |
| .65            | 1755.28       | 5.93      | .65            | 2000.28       | 6.33      |
| 29.7           | 1761.21       | 5.94      | 31.7           | 2006.61       | 6.34      |
| .75            | 1767.15       | 5.95      | .75            | 2012.95       | 6.35      |
| 29.8           | 1773.10       | 5.96      | 31.8           | 2019.30       | 6.36      |
| .85            | 1779.06       | 5.97      | .85            | 2025.66       | 6.37      |
| 29.9           | 1785.03       | 5.98      | 31.9           | 2032.03       | 6.38      |
| .95            | 1791.01       | 5.99      | .95            | 2038.41       | 6.39      |
|                | 1797.00       | 6.00      |                | 2044.80       | 6.40      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 32.0           | 2044.80       | 6.40      | 34.0           | 2308.60       | 6.80      |
| .05            | 2051.20       | 6.41      | .05            | 2315.40       | 6.81      |
| 32.1           | 2057.61       | 6.42      | 34.1           | 2322.21       | 6.82      |
| .15            | 2064.03       | 6.43      | .15            | 2329.03       | 6.83      |
| 32.2           | 2070.46       | 6.44      | 34.2           | 2335.86       | 6.84      |
| .25            | 2076.90       | 6.45      | .25            | 2342.70       | 6.85      |
| 32.3           | 2083.35       | 6.46      | 34.3           | 2349.55       | 6.86      |
| .35            | 2089.81       | 6.47      | .35            | 2356.41       | 6.87      |
| 32.4           | 2096.28       | 6.48      | 34.4           | 2363.28       | 6.88      |
| .45            | 2102.76       | 6.49      | .45            | 2370.16       | 6.89      |
| 32.5           | 2109.25       | 6.50      | 34.5           | 2377.05       | 6.90      |
| .55            | 2115.75       | 6.51      | .55            | 2383.95       | 6.91      |
| 32.6           | 2122.26       | 6.52      | 34.6           | 2390.86       | 6.92      |
| .65            | 2128.78       | 6.53      | .65            | 2397.78       | 6.93      |
| 32.7           | 2135.31       | 6.54      | 34.7           | 2404.71       | 6.94      |
| .75            | 2141.85       | 6.55      | .75            | 2411.65       | 6.95      |
| 32.8           | 2148.40       | 6.56      | 34.8           | 2418.60       | 6.96      |
| .85            | 2154.96       | 6.57      | .85            | 2425.56       | 6.97      |
| 32.9           | 2161.53       | 6.58      | 34.9           | 2432.53       | 6.98      |
| .95            | 2168.11       | 6.59      | .95            | 2439.51       | 6.99      |
| 33.0           | 2174.70       | 6.60      | 35.0           | 2446.50       | 7.00      |
| .05            | 2181.30       | 6.61      | .05            | 2453.50       | 7.01      |
| 33.1           | 2187.91       | 6.62      | 35.1           | 2460.51       | 7.02      |
| .15            | 2194.53       | 6.63      | .15            | 2467.53       | 7.03      |
| 33.2           | 2201.16       | 6.64      | 35.2           | 2474.56       | 7.04      |
| .25            | 2207.80       | 6.65      | .25            | 2481.60       | 7.05      |
| 33.3           | 2214.45       | 6.66      | 35.3           | 2488.65       | 7.06      |
| .35            | 2221.11       | 6.67      | .35            | 2495.71       | 7.07      |
| 33.4           | 2227.78       | 6.68      | 35.4           | 2502.78       | 7.08      |
| .45            | 2234.46       | 6.69      | .45            | 2509.86       | 7.09      |
| 33.5           | 2241.15       | 6.70      | 35.5           | 2516.95       | 7.10      |
| .55            | 2247.85       | 6.71      | .55            | 2524.05       | 7.11      |
| 33.6           | 2254.56       | 6.72      | 35.6           | 2531.16       | 7.12      |
| .65            | 2261.28       | 6.73      | .65            | 2538.28       | 7.13      |
| 33.7           | 2268.01       | 6.74      | 35.7           | 2545.41       | 7.14      |
| .75            | 2274.75       | 6.75      | .75            | 2552.55       | 7.15      |
| 33.8           | 2281.50       | 6.76      | 35.8           | 2559.70       | 7.16      |
| .85            | 2288.26       | 6.77      | .85            | 2566.86       | 7.17      |
| 33.9           | 2295.03       | 6.78      | 35.9           | 2574.03       | 7.18      |
| .95            | 2301.81       | 6.79      | .95            | 2581.21       | 7.19      |
|                | 2308.60       | 6.80      |                | 2588.40       | 7.20      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 36.0           | 2588.40       | 7.20      | 38.0           | 2884.20       | 7.60      |
| .05            | 2595.60       | 7.21      | .05            | 2891.80       | 7.61      |
| 36.1           | 2602.81       | 7.22      | 38.1           | 2899.41       | 7.62      |
| .15            | 2610.03       | 7.23      | .15            | 2907.03       | 7.63      |
| 36.2           | 2617.26       | 7.24      | 38.2           | 2914.66       | 7.64      |
| .25            | 2624.50       | 7.25      | .25            | 2922.30       | 7.65      |
| 36.3           | 2631.75       | 7.26      | 38.3           | 2929.95       | 7.66      |
| .35            | 2639.01       | 7.27      | .35            | 2937.61       | 7.67      |
| 36.4           | 2646.28       | 7.28      | 38.4           | 2945.28       | 7.68      |
| .45            | 2653.56       | 7.29      | .45            | 2952.96       | 7.69      |
| 36.5           | 2660.85       | 7.30      | 38.5           | 2960.65       | 7.70      |
| .55            | 2668.15       | 7.31      | .55            | 2968.35       | 7.71      |
| 36.6           | 2675.46       | 7.32      | 38.6           | 2976.06       | 7.72      |
| .65            | 2682.78       | 7.33      | .65            | 2983.78       | 7.73      |
| 36.7           | 2690.11       | 7.34      | 38.7           | 2991.51       | 7.74      |
| .75            | 2697.45       | 7.35      | .75            | 2999.25       | 7.75      |
| 36.8           | 2704.80       | 7.36      | 38.8           | 3007.00       | 7.76      |
| .85            | 2712.16       | 7.37      | .85            | 3014.76       | 7.77      |
| 36.9           | 2719.53       | 7.38      | 38.9           | 3022.53       | 7.78      |
| .95            | 2726.91       | 7.39      | .95            | 3030.31       | 7.79      |
| 37.0           | 2734.30       | 7.40      | 39.0           | 3038.10       | 7.80      |
| .05            | 2741.70       | 7.41      | .05            | 3045.90       | 7.81      |
| 37.1           | 2749.11       | 7.42      | 39.1           | 3053.71       | 7.82      |
| .15            | 2756.53       | 7.43      | .15            | 3061.53       | 7.83      |
| 37.2           | 2763.96       | 7.44      | 39.2           | 3069.36       | 7.84      |
| .25            | 2771.40       | 7.45      | .25            | 3077.20       | 7.85      |
| 27.3           | 2778.85       | 7.46      | 39.3           | 3085.05       | 7.86      |
| .35            | 2786.31       | 7.47      | .35            | 3092.91       | 7.87      |
| 37.4           | 2793.78       | 7.48      | 39.4           | 3100.78       | 7.88      |
| .45            | 2801.26       | 7.49      | .45            | 3108.66       | 7.89      |
| 37.5           | 2808.75       | 7.50      | 39.5           | 3116.55       | 7.90      |
| .55            | 2816.25       | 7.51      | .55            | 3124.45       | 7.91      |
| 37.6           | 2823.76       | 7.52      | 39.6           | 3132.36       | 7.92      |
| .65            | 2831.28       | 7.53      | .65            | 3140.28       | 7.93      |
| 37.7           | 2838.81       | 7.54      | 39.7           | 3148.21       | 7.94      |
| .75            | 2846.35       | 7.55      | .75            | 3156.15       | 7.95      |
| 37.8           | 2853.90       | 7.56      | 39.8           | 3164.10       | 7.96      |
| .85            | 2861.46       | 7.57      | .85            | 3172.06       | 7.97      |
| 37.9           | 2869.03       | 7.58      | 39.9           | 3180.03       | 7.98      |
| .95            | 2876.61       | 7.59      | .95            | 3188.01       | 7.99      |
|                | 2884.20       | 7.60      |                | 3196.00       | 8.00      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
|                | 3196.00       | 8.00      |                | 3523.80       | 8.40      |
| 40.0           | 3204.00       | 8.01      | 42.0           | 3532.20       | 8.41      |
| .05            | 3212.01       | 8.02      | .05            | 3540.61       | 8.42      |
| 40.1           | 3220.03       | 8.03      | 42.1           | 3549.03       | 8.43      |
| .15            | 3228.06       | 8.04      | .15            | 3557.46       | 8.44      |
| 40.2           | 3236.10       | 8.05      | 42.2           | 3565.90       | 8.45      |
| .25            | 3244.15       | 8.06      | .25            | 3574.35       | 8.46      |
| 40.3           | 3252.21       | 8.07      | 42.3           | 3582.81       | 8.47      |
| .35            | 3260.28       | 8.08      | .35            | 3591.28       | 8.48      |
| 40.4           | 3268.36       | 8.09      | 42.4           | 3599.76       | 8.49      |
| .45            | 3276.45       | 8.10      | .45            | 3608.25       | 8.50      |
| 40.5           | 3284.55       | 8.11      | 42.5           | 3616.75       | 8.51      |
| .55            | 3292.66       | 8.12      | .55            | 3625.26       | 8.52      |
| 40.6           | 3300.78       | 8.13      | 42.6           | 3633.78       | 8.53      |
| .65            | 3308.91       | 8.14      | .65            | 3642.31       | 8.54      |
| 40.7           | 3317.05       | 8.15      | 42.7           | 3650.85       | 8.55      |
| .75            | 3325.20       | 8.16      | .75            | 3659.40       | 8.56      |
| 40.8           | 3333.36       | 8.17      | 42.8           | 3667.96       | 8.57      |
| .85            | 3341.53       | 8.18      | .85            | 3676.53       | 8.58      |
| 40.9           | 3349.71       | 8.19      | 42.9           | 3685.11       | 8.59      |
| .95            | 3357.90       | 8.20      | .95            | 3693.70       | 8.60      |
| 41.0           | 3366.10       | 8.21      | 43.0           | 3702.30       | 8.61      |
| .05            | 3374.31       | 8.22      | .05            | 3710.91       | 8.62      |
| 41.1           | 3382.53       | 8.23      | 43.1           | 3719.53       | 8.63      |
| .15            | 3390.76       | 8.24      | .15            | 3728.16       | 8.64      |
| 41.2           | 3399.00       | 8.25      | 43.2           | 3736.80       | 8.65      |
| .25            | 3407.25       | 8.26      | .25            | 3745.45       | 8.66      |
| 41.3           | 3415.51       | 8.27      | 43.3           | 3754.11       | 8.67      |
| .35            | 3423.78       | 8.28      | .35            | 3762.78       | 8.68      |
| 41.4           | 3432.06       | 8.29      | 43.4           | 3771.46       | 8.69      |
| .45            | 3440.35       | 8.30      | .45            | 3780.15       | 8.70      |
| 41.5           | 3448.65       | 8.31      | 43.5           | 3788.85       | 8.71      |
| .55            | 3456.96       | 8.32      | .55            | 3797.56       | 8.72      |
| 41.6           | 3465.28       | 8.33      | 43.6           | 3806.28       | 8.73      |
| .65            | 3473.61       | 8.34      | .65            | 3815.01       | 8.74      |
| 41.7           | 3481.95       | 8.35      | 43.7           | 3823.75       | 8.75      |
| .75            | 3490.30       | 8.36      | .75            | 3832.50       | 8.76      |
| 41.8           | 3498.66       | 8.37      | 43.8           | 3841.26       | 8.77      |
| .85            | 3507.03       | 8.38      | .85            | 3850.03       | 8.78      |
| 41.9           | 3515.41       | 8.39      | 43.9           | 3858.81       | 8.79      |
| .95            | 3523.80       | 8.40      | .95            | 3867.60       | 8.80      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Area.</i> | <i>D.</i> | <i>Depths.</i> | <i>Area.</i> | <i>D.</i> |
|----------------|--------------|-----------|----------------|--------------|-----------|
| 44.0           | 3867.60      | 8.80      | 46.0           | 4227.40      | 9.20      |
| .05            | 3876.40      | 8.81      |                | 4236.60      | 9.21      |
| 44.1           | 3885.21      | 8.82      | .05            | 4245.81      | 9.22      |
| .15            | 3894.03      | 8.83      | 46.1           | 4255.03      | 9.23      |
| 44.2           | 3902.86      | 8.84      | .15            | 4264.26      | 9.24      |
| .25            | 3911.70      | 8.85      | 46.2           | 4273.50      | 9.25      |
| 44.3           | 3920.55      | 8.86      | .25            | 4282.75      | 9.26      |
| .35            | 3929.41      | 8.87      | 46.3           | 4292.01      | 9.27      |
| 44.4           | 3938.28      | 8.88      | .35            | 4301.28      | 9.28      |
| .45            | 3947.16      | 8.89      | 46.4           | 4310.56      | 9.29      |
| 44.5           | 3956.05      | 8.90      | .45            | 4319.85      | 9.30      |
| .55            | 3964.95      | 8.91      | 46.5           | 4329.15      | 9.31      |
| 44.6           | 3973.86      | 8.92      | .55            | 4338.46      | 9.32      |
| .65            | 3982.78      | 8.93      | 46.6           | 4347.78      | 9.33      |
| 44.7           | 3991.71      | 8.94      | .65            | 4357.11      | 9.34      |
| .75            | 4000.65      | 8.95      | 46.7           | 4366.45      | 9.35      |
| 44.8           | 4009.60      | 8.96      | .75            | 4375.80      | 9.36      |
| .85            | 4018.56      | 8.97      | 46.8           | 4385.16      | 9.37      |
| 44.9           | 4027.53      | 8.98      | .85            | 4394.53      | 9.38      |
| .95            | 4036.51      | 8.99      | 46.9           | 4403.91      | 9.39      |
| 45.0           | 4045.50      | 9.00      | .95            | 4413.30      | 9.40      |
| .05            | 4054.50      | 9.01      | 47.0           | 4422.70      | 9.41      |
| 45.1           | 4063.51      | 9.02      | .05            | 4432.11      | 9.42      |
| .15            | 4072.53      | 9.03      | 47.1           | 4441.53      | 9.43      |
| 45.2           | 4081.56      | 9.04      | .15            | 4450.96      | 9.44      |
| .25            | 4090.60      | 9.05      | 47.2           | 4460.40      | 9.45      |
| 45.3           | 4099.65      | 9.06      | .25            | 4469.85      | 9.46      |
| .35            | 4108.71      | 9.07      | 47.3           | 4479.31      | 9.47      |
| 45.4           | 4117.78      | 9.08      | .35            | 4488.78      | 9.48      |
| .45            | 4126.86      | 9.09      | 47.4           | 4498.26      | 9.49      |
| 45.5           | 4135.95      | 9.10      | .45            | 4507.75      | 9.50      |
| .55            | 4145.05      | 9.11      | 47.5           | 4517.25      | 9.51      |
| 45.6           | 4154.16      | 9.12      | .55            | 4526.76      | 9.52      |
| .65            | 4163.28      | 9.13      | 47.6           | 4536.28      | 9.53      |
| 45.7           | 4172.41      | 9.14      | .65            | 4545.81      | 9.54      |
| .75            | 4181.55      | 9.15      | 47.7           | 4555.35      | 9.55      |
| 45.8           | 4190.70      | 9.16      | .75            | 4564.90      | 9.56      |
| .85            | 4199.86      | 9.17      | 47.8           | 4574.46      | 9.57      |
| 45.9           | 4209.03      | 9.18      | .85            | 4584.03      | 9.58      |
| .95            | 4218.21      | 9.19      | 47.9           | 4593.61      | 9.59      |
|                | 4227.40      | 9.20      | .95            | 4603.20      | 9.60      |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 48.0           | 4608.20       | 9.60      | 50.0           | 4995.00       | 10.00     |
| .05            | 4612.80       | 9.61      | .05            | 5005.00       | 10.01     |
| 48.1           | 4622.41       | 9.62      | 50.1           | 5015.01       | 10.02     |
| .15            | 4632.03       | 9.63      | .15            | 5025.03       | 10.03     |
| 48.2           | 4641.66       | 9.64      | 50.2           | 5035.06       | 10.04     |
| .25            | 4651.30       | 9.65      | .25            | 5045.10       | 10.05     |
| 48.3           | 4660.95       | 9.66      | 50.3           | 5055.15       | 10.06     |
| .35            | 4670.61       | 9.67      | .35            | 5065.21       | 10.07     |
| 48.4           | 4680.28       | 9.68      | 50.4           | 5075.28       | 10.08     |
| .45            | 4689.96       | 9.69      | .45            | 5085.36       | 10.09     |
| 48.5           | 4699.65       | 9.70      | 50.5           | 5095.45       | 10.10     |
| .55            | 4709.35       | 9.71      | .55            | 5105.55       | 10.11     |
| 48.6           | 4719.06       | 9.72      | 50.6           | 5115.66       | 10.12     |
| .65            | 4728.78       | 9.73      | .65            | 5125.78       | 10.13     |
| 48.7           | 4738.51       | 9.74      | 50.7           | 5135.91       | 10.14     |
| .75            | 4748.25       | 9.75      | .75            | 5146.05       | 10.15     |
| 48.8           | 4758.00       | 9.76      | 50.8           | 5156.20       | 10.16     |
| .85            | 4767.76       | 9.77      | .85            | 5166.36       | 10.17     |
| 48.9           | 4777.53       | 9.78      | 50.9           | 5176.53       | 10.18     |
| .95            | 4787.31       | 9.79      | .95            | 5186.71       | 10.19     |
| 49.0           | 4797.10       | 9.80      | 51.0           | 5196.90       | 10.20     |
| .05            | 4806.90       | 9.81      | .05            | 5207.10       | 10.21     |
| 49.1           | 4816.71       | 9.82      | 51.1           | 5217.31       | 10.22     |
| .15            | 4826.53       | 9.83      | .15            | 5227.53       | 10.23     |
| 49.2           | 4836.36       | 9.84      | 51.2           | 5237.76       | 10.24     |
| .25            | 4846.20       | 9.85      | .25            | 5248.00       | 10.25     |
| 49.3           | 4856.05       | 9.86      | 51.3           | 5258.25       | 10.26     |
| .35            | 4865.91       | 9.87      | .35            | 5268.51       | 10.27     |
| 49.4           | 4875.78       | 9.88      | 51.4           | 5278.78       | 10.28     |
| .45            | 4885.66       | 9.89      | .45            | 5289.06       | 10.29     |
| 49.5           | 4895.55       | 9.90      | 51.5           | 5299.35       | 10.30     |
| .55            | 4905.45       | 9.91      | .55            | 5309.65       | 10.31     |
| 49.6           | 4915.36       | 9.92      | 51.6           | 5319.96       | 10.32     |
| .65            | 4925.28       | 9.93      | .65            | 5330.28       | 10.33     |
| 49.7           | 4935.21       | 9.94      | 51.7           | 5340.61       | 10.34     |
| .75            | 4945.15       | 9.95      | .75            | 5350.95       | 10.35     |
| 49.8           | 4955.10       | 9.96      | 51.8           | 5361.30       | 10.36     |
| .85            | 4965.06       | 9.97      | .85            | 5371.66       | 10.37     |
| 49.9           | 4975.03       | 9.98      | 51.9           | 5382.03       | 10.38     |
| .95            | 4985.01       | 9.99      | .95            | 5392.41       | 10.39     |
|                | 4995.00       | 10.00     |                | 5402.80       | 10.40     |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 52.0           | 5402.80       | 10.40     | 54.0           | 5826.60       | 10.80     |
| .05            | 5413.20       | 10.41     | .05            | 5837.40       | 10.81     |
| 52.1           | 5423.61       | 10.42     | 54.1           | 5848.21       | 10.82     |
| .15            | 5434.03       | 10.43     | .15            | 5859.03       | 10.83     |
| 52.2           | 5444.46       | 10.44     | 54.2           | 5869.86       | 10.84     |
| .25            | 5454.90       | 10.45     | .25            | 5880.70       | 10.85     |
| 52.3           | 5465.35       | 10.46     | 54.3           | 5891.55       | 10.86     |
| .35            | 5475.81       | 10.47     | .35            | 5902.41       | 10.87     |
| 52.4           | 5486.28       | 10.48     | 54.4           | 5913.28       | 10.88     |
| .45            | 5496.76       | 10.49     | .45            | 5924.16       | 10.89     |
| 52.5           | 5507.25       | 10.50     | 54.5           | 5935.05       | 10.90     |
| .55            | 5517.75       | 10.51     | .55            | 5945.95       | 10.91     |
| 52.6           | 5528.26       | 10.52     | 54.6           | 5956.86       | 10.92     |
| .65            | 5538.78       | 10.53     | .65            | 5967.78       | 10.93     |
| 52.7           | 5549.31       | 10.54     | 54.7           | 5978.71       | 10.94     |
| .75            | 5559.85       | 10.55     | .75            | 5989.65       | 10.95     |
| 52.8           | 5570.40       | 10.56     | 54.8           | 6000.60       | 10.96     |
| .85            | 5580.96       | 10.57     | .85            | 6011.56       | 10.97     |
| 52.9           | 5591.53       | 10.58     | 54.9           | 6022.53       | 10.98     |
| .95            | 5602.11       | 10.59     | .95            | 6033.51       | 10.99     |
| 53.0           | 5612.70       | 10.60     | 55.0           | 6044.50       | 11.00     |
| .05            | 5623.30       | 10.61     | .05            | 6055.50       | 11.01     |
| 53.1           | 5633.91       | 10.62     | 55.1           | 6066.51       | 11.02     |
| .15            | 5644.53       | 10.63     | .15            | 6077.53       | 11.03     |
| 53.2           | 5655.16       | 10.64     | 55.2           | 6088.56       | 11.04     |
| .25            | 5665.80       | 10.65     | .25            | 6099.60       | 11.05     |
| 53.3           | 5676.45       | 10.66     | 55.3           | 6110.65       | 11.06     |
| .35            | 5687.11       | 10.67     | .35            | 6121.71       | 11.07     |
| 53.4           | 5697.78       | 10.68     | 55.4           | 6132.78       | 11.08     |
| .45            | 5708.46       | 10.69     | .45            | 6143.86       | 11.09     |
| 53.5           | 5719.15       | 10.70     | 55.5           | 6154.95       | 11.10     |
| .55            | 5729.85       | 10.71     | .55            | 6166.05       | 11.11     |
| 53.6           | 5740.56       | 10.72     | 55.6           | 6177.16       | 11.12     |
| .65            | 5751.28       | 10.73     | .65            | 6188.28       | 11.13     |
| 53.7           | 5762.01       | 10.74     | 55.7           | 6199.41       | 11.14     |
| .75            | 5772.75       | 10.75     | .75            | 6210.55       | 11.15     |
| 53.8           | 5783.50       | 10.76     | 55.8           | 6221.70       | 11.16     |
| .85            | 5794.26       | 10.77     | .85            | 6232.86       | 11.17     |
| 53.9           | 5805.03       | 10.78     | 55.9           | 6244.03       | 11.18     |
| .95            | 5815.81       | 10.79     | .95            | 6255.21       | 11.19     |
|                | 5826.60       | 10.80     |                | 6266.40       | 11.20     |



TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 56.0           | 6266.40       | 11.20     | 58.0           | 6722.20       | 11.60     |
| .05            | 6277.60       | 11.21     | .05            | 6733.80       | 11.61     |
| 56.1           | 6288.81       | 11.22     | .05            | 6745.41       | 11.62     |
| .15            | 6300.03       | 11.23     | 58.1           | 6757.03       | 11.63     |
| .15            | 6311.26       | 11.24     | .15            | 6768.66       | 11.64     |
| 56.2           | 6322.50       | 11.25     | 58.2           | 6780.30       | 11.65     |
| .25            | 6333.75       | 11.26     | .25            | 6791.95       | 11.66     |
| 56.3           | 6345.01       | 11.27     | 58.3           | 6803.61       | 11.67     |
| .35            | 6356.28       | 11.28     | .35            | 6815.28       | 11.68     |
| 56.4           | 6367.56       | 11.29     | 58.4           | 6826.96       | 11.69     |
| .45            | 6378.85       | 11.30     | .45            | 6838.65       | 11.70     |
| 56.5           | 6390.15       | 11.31     | 58.5           | 6850.35       | 11.71     |
| .55            | 6401.46       | 11.32     | .55            | 6862.06       | 11.72     |
| 56.6           | 6412.78       | 11.33     | 58.6           | 6873.78       | 11.73     |
| .65            | 6424.11       | 11.34     | .65            | 6885.51       | 11.74     |
| 56.7           | 6435.45       | 11.35     | 58.7           | 6897.25       | 11.75     |
| .75            | 6446.80       | 11.36     | .75            | 6909.00       | 11.76     |
| 56.8           | 6458.16       | 11.37     | 58.8           | 6920.76       | 11.77     |
| .85            | 6469.53       | 11.38     | .85            | 6932.53       | 11.78     |
| 56.9           | 6480.91       | 11.39     | 58.9           | 6944.31       | 11.79     |
| .95            | 6492.30       | 11.40     | .95            | 6956.10       | 11.80     |
| 57.0           | 6503.70       | 11.41     | 59.0           | 6967.90       | 11.81     |
| .05            | 6515.11       | 11.42     | .05            | 6979.71       | 11.82     |
| 57.1           | 6526.53       | 11.43     | 59.1           | 6991.53       | 11.83     |
| .15            | 6537.96       | 11.44     | .15            | 7003.36       | 11.84     |
| 57.2           | 6549.40       | 11.45     | 59.2           | 7015.20       | 11.85     |
| .25            | 6560.85       | 11.46     | .25            | 7027.05       | 11.86     |
| 57.3           | 6572.31       | 11.47     | 59.3           | 7038.91       | 11.87     |
| .35            | 6583.78       | 11.48     | .35            | 7050.78       | 11.88     |
| 57.4           | 6595.26       | 11.49     | 59.4           | 7062.66       | 11.89     |
| .45            | 6606.75       | 11.50     | .45            | 7074.55       | 11.90     |
| 57.5           | 6618.25       | 11.51     | 59.5           | 7086.45       | 11.91     |
| .55            | 6629.76       | 11.52     | .55            | 7098.36       | 11.92     |
| 57.6           | 6641.28       | 11.53     | 59.6           | 7110.28       | 11.93     |
| .65            | 6652.81       | 11.54     | .65            | 7122.21       | 11.94     |
| 57.7           | 6664.35       | 11.55     | 59.7           | 7134.15       | 11.95     |
| .75            | 6675.90       | 11.56     | .75            | 7146.10       | 11.96     |
| 57.8           | 6687.46       | 11.57     | 59.8           | 7158.06       | 11.97     |
| .85            | 6699.03       | 11.58     | .85            | 7170.03       | 11.98     |
| 57.9           | 6710.61       | 11.59     | 59.9           | 7182.01       | 11.99     |
| .95            | 6722.20       | 11.60     | .95            | 7194.00       | 12.00     |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Area.</i> | <i>D.</i> | <i>Depths.</i> | <i>Area.</i> | <i>D.</i> |
|----------------|--------------|-----------|----------------|--------------|-----------|
| 60.0           | 7194.00      | 12.00     | 62.0           | 7681.80      | 12.40     |
| .05            | 7206.00      | 12.01     | .05            | 7694.20      | 12.41     |
| 60.1           | 7218.01      | 12.02     | 62.1           | 7706.61      | 12.42     |
| .15            | 7230.03      | 12.03     | .15            | 7719.03      | 12.43     |
| 60.2           | 7242.06      | 12.04     | 62.2           | 7731.46      | 12.44     |
| .25            | 7254.10      | 12.05     | .25            | 7743.90      | 12.45     |
| 60.3           | 7266.15      | 12.06     | 62.3           | 7756.35      | 12.46     |
| .35            | 7278.21      | 12.07     | .35            | 7768.81      | 12.47     |
| 60.4           | 7290.28      | 12.08     | 62.4           | 7781.28      | 12.48     |
| .45            | 7302.36      | 12.09     | .45            | 7793.76      | 12.49     |
| 60.5           | 7314.45      | 12.10     | 62.5           | 7806.25      | 12.50     |
| .55            | 7326.55      | 12.11     | .55            | 7818.75      | 12.51     |
| 60.6           | 7338.66      | 12.12     | 62.6           | 7831.26      | 12.52     |
| .65            | 7350.78      | 12.13     | .65            | 7843.78      | 12.53     |
| 60.7           | 7362.91      | 12.14     | 62.7           | 7856.31      | 12.54     |
| .75            | 7375.05      | 12.15     | .75            | 7868.85      | 12.55     |
| 60.8           | 7387.20      | 12.16     | 62.8           | 7881.40      | 12.56     |
| .85            | 7399.36      | 12.17     | .85            | 7893.96      | 12.57     |
| 60.9           | 7411.53      | 12.18     | 62.9           | 7906.53      | 12.58     |
| .95            | 7423.71      | 12.19     | .95            | 7919.11      | 12.59     |
| 61.0           | 7435.90      | 12.20     | 63.0           | 7931.70      | 12.60     |
| .05            | 7448.10      | 12.21     | .05            | 7944.30      | 12.61     |
| 61.1           | 7460.31      | 12.22     | 63.1           | 7956.91      | 12.62     |
| .15            | 7472.53      | 12.23     | .15            | 7969.53      | 12.63     |
| 61.2           | 7484.76      | 12.24     | 63.2           | 7982.16      | 12.64     |
| .25            | 7497.00      | 12.25     | .25            | 7994.80      | 12.65     |
| 61.3           | 7509.25      | 12.26     | 63.3           | 8007.45      | 12.66     |
| .35            | 7521.51      | 12.27     | .35            | 8020.11      | 12.67     |
| 61.4           | 7533.78      | 12.28     | 63.4           | 8032.78      | 12.68     |
| .45            | 7546.06      | 12.29     | .45            | 8045.46      | 12.69     |
| 61.5           | 7558.35      | 12.30     | 63.5           | 8058.15      | 12.70     |
| .55            | 7570.65      | 12.31     | .55            | 8070.85      | 12.71     |
| 61.6           | 7582.96      | 12.32     | 63.6           | 8083.56      | 12.72     |
| .65            | 7595.28      | 12.33     | .65            | 8096.28      | 12.73     |
| 61.7           | 7607.61      | 12.34     | 63.7           | 8109.01      | 12.74     |
| .75            | 7619.95      | 12.35     | .75            | 8121.75      | 12.75     |
| 61.8           | 7632.30      | 12.36     | 63.8           | 8134.50      | 12.76     |
| .85            | 7644.66      | 12.37     | .85            | 8147.26      | 12.77     |
| 61.9           | 7657.03      | 12.38     | 63.9           | 8160.03      | 12.78     |
| .95            | 7669.41      | 12.39     | .95            | 8172.81      | 12.79     |
|                | 7681.80      | 12.40     |                | 8185.60      | 12.80     |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Arcas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Arcas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 64.0           | 8185.60       | 12.80     | 66.0           | 8705.40       | 13.20     |
| .05            | 8198.40       | 12.81     | .05            | 8718.60       | 13.21     |
| 64.1           | 8211.21       | 12.82     | 66.1           | 8731.81       | 13.22     |
| .15            | 8224.03       | 12.83     | .15            | 8745.03       | 13.23     |
| 64.2           | 8236.86       | 12.84     | 66.2           | 8758.26       | 13.24     |
| .25            | 8249.70       | 12.85     | .25            | 8771.50       | 13.25     |
| 64.3           | 8262.55       | 12.86     | 66.3           | 8784.75       | 13.26     |
| .35            | 8275.41       | 12.87     | .35            | 8798.01       | 13.27     |
| 64.4           | 8288.28       | 12.88     | 66.4           | 8811.28       | 13.28     |
| .45            | 8301.16       | 12.89     | .45            | 8824.56       | 13.29     |
| 64.5           | 8314.05       | 12.90     | 66.5           | 8837.85       | 13.30     |
| .55            | 8326.95       | 12.91     | .55            | 8851.15       | 13.31     |
| 64.6           | 8339.86       | 12.92     | 66.6           | 8864.46       | 13.32     |
| .65            | 8352.78       | 12.93     | .65            | 8877.78       | 13.33     |
| 64.7           | 8365.71       | 12.94     | 66.7           | 8891.11       | 13.34     |
| .75            | 8378.65       | 12.95     | .75            | 8904.45       | 13.35     |
| 64.8           | 8391.60       | 12.96     | 66.8           | 8917.80       | 13.36     |
| .85            | 8404.56       | 12.97     | .85            | 8931.16       | 13.37     |
| 64.9           | 8417.53       | 12.98     | 66.9           | 8944.53       | 13.38     |
| .95            | 8430.51       | 12.99     | .95            | 8957.91       | 13.39     |
| 65.0           | 8443.50       | 13.00     | 67.0           | 8971.30       | 13.40     |
| .05            | 8456.50       | 13.01     | .05            | 8984.70       | 13.41     |
| 65.1           | 8469.51       | 13.02     | 67.1           | 8998.11       | 13.42     |
| .15            | 8482.53       | 13.03     | .15            | 9011.53       | 13.43     |
| 65.2           | 8495.56       | 13.04     | 67.2           | 9024.96       | 13.44     |
| .25            | 8508.60       | 13.05     | .25            | 9038.40       | 13.45     |
| 65.3           | 8521.65       | 13.06     | 67.3           | 9051.85       | 13.46     |
| .35            | 8534.71       | 13.07     | .35            | 9065.31       | 13.47     |
| 65.4           | 8547.78       | 13.08     | 67.4           | 9078.78       | 13.48     |
| .45            | 8560.86       | 13.09     | .45            | 9092.26       | 13.49     |
| 65.5           | 8573.95       | 13.10     | 67.5           | 9105.75       | 13.50     |
| .55            | 8587.05       | 13.11     | .55            | 9119.25       | 13.51     |
| 65.6           | 8600.16       | 13.12     | 67.6           | 9132.76       | 13.52     |
| .65            | 8613.28       | 13.13     | .65            | 9146.28       | 13.53     |
| 65.7           | 8626.41       | 13.14     | 67.7           | 9159.81       | 13.54     |
| .75            | 8639.55       | 13.15     | .75            | 9173.35       | 13.55     |
| 65.8           | 8652.70       | 13.16     | 67.8           | 9186.90       | 13.56     |
| .85            | 8665.86       | 13.17     | .85            | 9200.46       | 13.57     |
| 65.9           | 8679.03       | 13.18     | 67.9           | 9214.03       | 13.58     |
| .95            | 8692.21       | 13.19     | .95            | 9227.61       | 13.59     |
|                | 8705.40       | 13.20     |                | 9241.20       | 13.60     |

TABLE 1.—END AREAS—SLOPE 2 TO 1.

| <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> | <i>Depths.</i> | <i>Areas.</i> | <i>D.</i> |
|----------------|---------------|-----------|----------------|---------------|-----------|
| 68.0           | 9241.20       | 13.60     | 70.0           | 9793.00       | 14.00     |
| .05            | 9254.80       | 13.61     | .05            | 9807.00       | 14.01     |
| 68.1           | 9268.41       | 13.62     | 70.1           | 9821.01       | 14.02     |
| .15            | 9282.03       | 13.63     | .15            | 9835.03       | 14.03     |
| 68.2           | 9295.66       | 13.64     | 70.2           | 9849.06       | 14.04     |
| .25            | 9309.30       | 13.65     | .25            | 9863.10       | 14.05     |
| 68.3           | 9322.95       | 13.66     | 70.3           | 9877.15       | 14.06     |
| .35            | 9336.61       | 13.67     | .35            | 9891.21       | 14.07     |
| 68.4           | 9350.28       | 13.68     | 70.4           | 9905.28       | 14.08     |
| .45            | 9363.96       | 13.69     | .45            | 9919.36       | 14.09     |
| 68.5           | 9377.65       | 13.70     | 70.5           | 9933.45       | 14.10     |
| .55            | 9391.35       | 13.71     | .55            | 9947.55       | 14.11     |
| 68.6           | 9405.06       | 13.72     | 70.6           | 9961.66       | 14.12     |
| .65            | 9418.78       | 13.73     | .65            | 9975.78       | 14.13     |
| 68.7           | 9432.51       | 13.74     | 70.7           | 9989.91       | 14.14     |
| .75            | 9446.25       | 13.75     | .75            | 10004.05      | 14.15     |
| 68.8           | 9460.00       | 13.76     | 70.8           | 10018.20      | 14.16     |
| .85            | 9473.76       | 13.77     | .85            | 10032.36      | 14.17     |
| 68.9           | 9487.53       | 13.78     | 70.9           | 10046.53      | 14.18     |
| .95            | 9501.31       | 13.79     | .95            | 10060.71      | 14.19     |
| 69.0           | 9515.10       | 13.80     | 71.0           | 10074.90      | 14.20     |
| .05            | 9528.90       | 13.81     | .05            | 10089.10      | 14.21     |
| 69.1           | 9542.71       | 13.82     | 71.1           | 10103.31      | 14.22     |
| .15            | 9556.53       | 13.83     | .15            | 10117.53      | 14.23     |
| 69.2           | 9570.36       | 13.84     | 71.2           | 10131.76      | 14.24     |
| .25            | 9584.20       | 13.85     | .25            | 10146.00      | 14.25     |
| 69.3           | 9598.05       | 13.86     | 71.3           | 10160.25      | 14.26     |
| .35            | 9611.91       | 13.87     | .35            | 10174.51      | 14.27     |
| 69.4           | 9625.78       | 13.88     | 71.4           | 10188.78      | 14.28     |
| .45            | 9639.66       | 13.89     | .45            | 10203.06      | 14.29     |
| 69.5           | 9653.55       | 13.90     | 71.5           | 10217.35      | 14.30     |
| .55            | 9667.45       | 13.91     | .55            | 10231.65      | 14.31     |
| 69.6           | 9681.36       | 13.92     | 71.6           | 10245.96      | 14.32     |
| .65            | 9695.28       | 13.93     | .65            | 10260.28      | 14.33     |
| 69.7           | 9709.21       | 13.94     | 71.7           | 10274.61      | 14.34     |
| .75            | 9723.15       | 13.95     | .75            | 10288.95      | 14.35     |
| 69.8           | 9737.10       | 13.96     | 71.8           | 10303.30      | 14.36     |
| .85            | 9751.06       | 13.97     | .85            | 10317.66      | 14.37     |
| 69.9           | 9765.03       | 13.98     | 71.9           | 10332.03      | 14.38     |
| .95            | 9779.01       | 13.99     | .95            | 10346.41      | 14.39     |
|                | 9793.00       | 14.00     |                | 10360.80      | 14.40     |

Table 2.—*Corrections for Cross Average—slope 2 to 1.*

| $v$ | $\frac{v^2}{8}$ | $v$ | $\frac{v^2}{8}$ | $v$  | $\frac{v^2}{8}$ |
|-----|-----------------|-----|-----------------|------|-----------------|
|     |                 | 4.0 | 2.00            | 8.0  | 8.00            |
| 0.1 | .00             | .1  | 2.10            | .1   | 8.20            |
| .2  | .00             | .2  | 2.20            | .2   | 8.40            |
| .3  | .01             | .3  | 2.31            | .3   | 8.61            |
| .4  | .02             | .4  | 2.42            | .4   | 8.82            |
| .5  | .03             | .5  | 2.53            | .5   | 9.03            |
| .6  | .05             | .6  | 2.65            | .6   | 9.25            |
| .7  | .06             | .7  | 2.76            | .7   | 9.46            |
| .8  | .08             | .8  | 2.88            | .8   | 9.68            |
| .9  | .10             | .9  | 3.00            | .9   | 9.90            |
| 1.0 | .12             | 5.0 | 3.12            | 9.0  | 10.12           |
| .1  | .15             | .1  | 3.25            | .1   | 10.35           |
| .2  | .18             | .2  | 3.38            | .2   | 10.58           |
| .3  | .21             | .3  | 3.51            | .3   | 10.81           |
| .4  | .25             | .4  | 3.65            | .4   | 11.05           |
| .5  | .28             | .5  | 3.78            | .5   | 11.28           |
| .6  | .32             | .6  | 3.92            | .6   | 11.52           |
| .7  | .36             | .7  | 4.06            | .7   | 11.76           |
| .8  | .40             | .8  | 4.20            | .8   | 12.00           |
| .9  | .45             | .9  | 4.35            | .9   | 12.25           |
| 2.0 | .50             | 6.0 | 4.50            | 10.0 | 12.50           |
| .1  | .55             | .1  | 4.65            | .1   | 12.75           |
| .2  | .61             | .2  | 4.81            | .2   | 13.01           |
| .3  | .66             | .3  | 4.96            | .3   | 13.26           |
| .4  | .72             | .4  | 5.12            | .4   | 13.52           |
| .5  | .78             | .5  | 5.28            | .5   | 13.78           |
| .6  | .84             | .6  | 5.44            | .6   | 14.04           |
| .7  | .91             | .7  | 5.61            | .7   | 14.31           |
| .8  | .98             | .8  | 5.78            | .8   | 14.58           |
| .9  | 1.05            | .9  | 5.95            | .9   | 14.85           |
| 3.0 | 1.13            | 7.0 | 6.13            | 11.0 | 15.13           |
| .1  | 1.20            | .1  | 6.30            | .1   | 15.40           |
| .2  | 1.28            | .2  | 6.48            | .2   | 15.68           |
| .3  | 1.36            | .3  | 6.66            | .3   | 15.96           |
| .4  | 1.44            | .4  | 6.84            | .4   | 16.24           |
| .5  | 1.53            | .5  | 7.03            | .5   | 16.53           |
| .6  | 1.62            | .6  | 7.22            | .6   | 16.82           |
| .7  | 1.71            | .7  | 7.41            | .7   | 17.11           |
| .8  | 1.81            | .8  | 7.61            | .8   | 17.41           |
| .9  | 1.90            | .9  | 7.80            | .9   | 17.70           |

Table 2.—Corrections for Cross Average—Slope 2 to 1.

| $v$  | $\frac{v^2}{8}$ | $v$  | $\frac{v^2}{8}$ | $v$  | $\frac{v^2}{8}$ |
|------|-----------------|------|-----------------|------|-----------------|
| 12.0 | 18.00           | 16.0 | 32.00           | 20.0 | 50.00           |
| .1   | 18.30           | .1   | 32.40           | .1   | 50.50           |
| .2   | 18.60           | .2   | 32.80           | .2   | 51.00           |
| .3   | 18.91           | .3   | 33.21           | .3   | 51.51           |
| .4   | 19.22           | .4   | 33.62           | .4   | 52.02           |
| .5   | 19.53           | .5   | 34.03           | .5   | 52.53           |
| .6   | 19.85           | .6   | 34.45           | .6   | 53.05           |
| .7   | 20.16           | .7   | 34.86           | .7   | 53.56           |
| .8   | 20.48           | .8   | 35.28           | .8   | 54.08           |
| .9   | 20.80           | .9   | 35.70           | .9   | 54.60           |
| 13.0 | 21.12           | 17.0 | 36.12           | 21.0 | 55.12           |
| .1   | 21.45           | .1   | 36.55           | .1   | 55.65           |
| .2   | 21.78           | .2   | 36.98           | .2   | 56.18           |
| .3   | 22.11           | .3   | 37.41           | .3   | 56.71           |
| .4   | 22.45           | .4   | 37.85           | .4   | 57.25           |
| .5   | 22.78           | .5   | 38.28           | .5   | 57.78           |
| .6   | 23.12           | .6   | 38.72           | .6   | 58.32           |
| .7   | 23.46           | .7   | 39.16           | .7   | 58.86           |
| .8   | 23.80           | .8   | 39.60           | .8   | 59.40           |
| .9   | 24.15           | .9   | 40.05           | .9   | 59.95           |
| 14.0 | 24.50           | 18.0 | 40.50           | 22.0 | 60.50           |
| .1   | 24.85           | .1   | 40.95           | .1   | 61.05           |
| .2   | 25.21           | .2   | 41.41           | .2   | 61.61           |
| .3   | 25.56           | .3   | 41.86           | .3   | 62.16           |
| .4   | 25.92           | .4   | 42.32           | .4   | 62.72           |
| .5   | 26.28           | .5   | 42.78           | .5   | 63.28           |
| .6   | 26.64           | .6   | 43.24           | .6   | 63.84           |
| .7   | 27.01           | .7   | 43.71           | .7   | 64.41           |
| .8   | 27.38           | .8   | 44.18           | .8   | 64.98           |
| .9   | 27.75           | .9   | 44.65           | .9   | 65.55           |
| 15.0 | 28.13           | 19.0 | 45.13           | 23.0 | 66.13           |
| .1   | 28.50           | .1   | 45.60           | .1   | 66.70           |
| .2   | 28.88           | .2   | 46.08           | .2   | 67.28           |
| .3   | 29.26           | .3   | 46.56           | .3   | 67.86           |
| .4   | 29.64           | .4   | 47.04           | .4   | 68.44           |
| .5   | 30.03           | .5   | 47.53           | .5   | 69.03           |
| .6   | 30.42           | .6   | 48.02           | .6   | 69.62           |
| .7   | 30.81           | .7   | 48.51           | .7   | 70.21           |
| .8   | 31.21           | .8   | 49.01           | .8   | 70.81           |
| .9   | 31.60           | .9   | 49.50           | .9   | 71.40           |

Table 2.—Corrections for Cross Average—Slope 2 to 1.

| $v$  | $\frac{v^2}{8}$ | $v$  | $\frac{v^2}{8}$ | $v$  | $\frac{v^2}{8}$ |
|------|-----------------|------|-----------------|------|-----------------|
| 24.0 | 72.00           | 27.0 | 91.13           | 30.0 | 112.50          |
| .1   | 72.60           | .1   | 91.80           | .1   | 113.25          |
| .2   | 73.20           | .2   | 92.48           | .2   | 114.01          |
| .3   | 73.81           | .3   | 93.16           | .3   | 114.76          |
| .4   | 74.42           | .4   | 93.84           | .4   | 115.52          |
| .5   | 75.03           | .5   | 94.53           | .5   | 116.28          |
| .6   | 75.65           | .6   | 95.22           | .6   | 117.04          |
| .7   | 76.26           | .7   | 95.91           | .7   | 117.81          |
| .8   | 76.88           | .8   | 96.61           | .8   | 118.58          |
| .9   | 77.50           | .9   | 97.30           | .9   | 119.35          |
| 25.0 | 78.12           | 28.0 | 98.00           | 31.0 | 120.13          |
| .1   | 78.75           | .1   | 98.70           | .1   | 120.90          |
| .2   | 79.38           | .2   | 99.40           | .2   | 121.68          |
| .3   | 80.01           | .3   | 100.11          | .3   | 122.46          |
| .4   | 80.65           | .4   | 100.82          | .4   | 123.24          |
| .5   | 81.28           | .5   | 101.53          | .5   | 124.03          |
| .6   | 81.92           | .6   | 102.25          | .6   | 124.82          |
| .7   | 82.56           | .7   | 102.96          | .7   | 125.61          |
| .8   | 83.20           | .8   | 103.68          | .8   | 126.41          |
| .9   | 83.85           | .9   | 104.40          | .9   | 127.20          |
| 26.0 | 84.50           | 29.0 | 105.12          |      |                 |
| .1   | 85.15           | .1   | 105.85          |      |                 |
| .2   | 85.81           | .2   | 106.58          |      |                 |
| .3   | 86.46           | .3   | 107.31          |      |                 |
| .4   | 87.12           | .4   | 108.05          |      |                 |
| .5   | 87.78           | .5   | 108.78          |      |                 |
| .6   | 88.44           | .6   | 109.52          |      |                 |
| .7   | 89.11           | .7   | 110.26          |      |                 |
| .8   | 89.78           | .8   | 111.00          |      |                 |
| .9   | 90.45           | .9   | 111.75          |      |                 |

Table 3.—*Contents of Prisms 10 ft. wide and 100 ft. long.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
|                |                  | 4.0            | 148.15           |
| 0.1            | 3.70             | .1             | 151.85           |
| .2             | 7.41             | .2             | 155.56           |
| .3             | 11.11            | .3             | 159.26           |
| .4             | 14.81            | .4             | 162.96           |
| .5             | 18.52            | .5             | 166.67           |
| .6             | 22.22            | .6             | 170.37           |
| .7             | 25.93            | .7             | 174.07           |
| .8             | 29.63            | .8             | 177.78           |
| .9             | 33.33            | .9             | 181.48           |
| 1.0            | 37.04            | 5.0            | 185.19           |
| .1             | 40.74            | .1             | 188.89           |
| .2             | 44.44            | .2             | 192.59           |
| .3             | 48.15            | .3             | 196.30           |
| .4             | 51.85            | .4             | 200.00           |
| .5             | 55.56            | .5             | 203.70           |
| .6             | 59.26            | .6             | 207.41           |
| .7             | 62.96            | .7             | 211.11           |
| .8             | 66.67            | .8             | 214.81           |
| .9             | 70.37            | .9             | 218.52           |
| 2.0            | 74.07            | 6.0            | 222.22           |
| .1             | 77.78            | .1             | 225.93           |
| .2             | 81.48            | .2             | 229.63           |
| .3             | 85.19            | .3             | 233.33           |
| .4             | 88.89            | .4             | 237.04           |
| .5             | 92.59            | .5             | 240.74           |
| .6             | 96.30            | .6             | 244.44           |
| .7             | 100.00           | .7             | 248.15           |
| .8             | 103.70           | .8             | 251.85           |
| .9             | 107.41           | .9             | 255.56           |
| 3.0            | 111.11           | 7.0            | 259.26           |
| .1             | 114.81           | .1             | 262.96           |
| .2             | 118.52           | .2             | 266.67           |
| .3             | 122.22           | .3             | 270.37           |
| .4             | 125.93           | .4             | 274.07           |
| .5             | 129.63           | .5             | 277.78           |
| .6             | 133.33           | .6             | 281.48           |
| .7             | 137.04           | .7             | 285.19           |
| .8             | 140.74           | .8             | 288.89           |
| .9             | 144.44           | .9             | 292.59           |



*Table 3.—Contents of Prisms 10 ft. wide and 100 ft. long.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
| 8.0            | 296.30           | 12.0           | 444.44           |
| .1             | 300.00           | .1             | 448.15           |
| .2             | 303.70           | .2             | 451.85           |
| .3             | 307.41           | .3             | 455.56           |
| .4             | 311.11           | .4             | 459.26           |
| .5             | 314.81           | .5             | 462.96           |
| .6             | 318.52           | .6             | 466.67           |
| .7             | 322.22           | .7             | 470.37           |
| .8             | 325.93           | .8             | 474.07           |
| .9             | 329.63           | .9             | 477.78           |
| 9.0            | 333.33           | 13.0           | 481.48           |
| .1             | 337.04           | .1             | 485.19           |
| .2             | 340.74           | .2             | 488.89           |
| .3             | 344.44           | .3             | 492.59           |
| .4             | 348.15           | .4             | 496.30           |
| .5             | 351.85           | .5             | 500.00           |
| .6             | 355.56           | .6             | 503.70           |
| .7             | 359.26           | .7             | 507.41           |
| .8             | 362.96           | .8             | 511.11           |
| .9             | 366.67           | .9             | 514.81           |
| 10.0           | 370.37           | 14.0           | 518.52           |
| .1             | 374.07           | .1             | 522.22           |
| .2             | 377.78           | .2             | 525.93           |
| .3             | 381.48           | .3             | 529.63           |
| .4             | 385.19           | .4             | 533.33           |
| .5             | 388.89           | .5             | 537.04           |
| .6             | 392.59           | .6             | 540.74           |
| .7             | 396.30           | .7             | 544.44           |
| .8             | 400.00           | .8             | 548.15           |
| .9             | 403.70           | .9             | 551.85           |
| 11.0           | 407.41           | 15.0           | 555.56           |
| .1             | 411.11           | .1             | 559.26           |
| .2             | 414.81           | .2             | 562.96           |
| .3             | 418.52           | .3             | 566.67           |
| .4             | 422.22           | .4             | 570.37           |
| .5             | 425.93           | .5             | 574.07           |
| .6             | 429.63           | .6             | 577.78           |
| .7             | 433.33           | .7             | 581.48           |
| .8             | 437.04           | .8             | 585.19           |
| .9             | 440.74           | .9             | 588.89           |

Table 3.—*Contents of Prisms 10 ft. wide and 100 ft. long.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
| 16.0           | 592.59           | 20.0           | 740.74           |
| .1             | 596.30           | .1             | 744.44           |
| .2             | 600.00           | .2             | 748.15           |
| .3             | 603.70           | .3             | 751.85           |
| .4             | 607.41           | .4             | 755.56           |
| .5             | 611.11           | .5             | 759.26           |
| .6             | 614.81           | .6             | 762.96           |
| .7             | 618.52           | .7             | 766.67           |
| .8             | 622.22           | .8             | 770.37           |
| .9             | 625.93           | .9             | 774.07           |
| 17.0           | 629.63           | 21.0           | 777.78           |
| .1             | 633.33           | .1             | 781.48           |
| .2             | 637.04           | .2             | 785.19           |
| .3             | 640.74           | .3             | 788.89           |
| .4             | 644.44           | .4             | 792.59           |
| .5             | 648.15           | .5             | 796.30           |
| .6             | 651.85           | .6             | 800.00           |
| .7             | 655.56           | .7             | 803.70           |
| .8             | 659.26           | .8             | 807.41           |
| .9             | 662.96           | .9             | 811.11           |
| 18.0           | 666.67           | 22.0           | 814.81           |
| .1             | 670.37           | .1             | 818.52           |
| .2             | 674.07           | .2             | 822.22           |
| .3             | 677.78           | .3             | 825.93           |
| .4             | 681.48           | .4             | 829.63           |
| .5             | 685.19           | .5             | 833.33           |
| .6             | 688.89           | .6             | 837.04           |
| .7             | 692.59           | .7             | 840.74           |
| .8             | 696.30           | .8             | 844.44           |
| .9             | 700.00           | .9             | 848.15           |
| 19.0           | 703.70           | 23.0           | 851.85           |
| .1             | 707.41           | .1             | 855.56           |
| .2             | 711.11           | .2             | 859.26           |
| .3             | 714.81           | .3             | 862.96           |
| .4             | 718.52           | .4             | 866.67           |
| .5             | 722.22           | .5             | 870.37           |
| .6             | 725.93           | .6             | 874.07           |
| .7             | 729.63           | .7             | 877.78           |
| .8             | 733.33           | .8             | 881.48           |
| .9             | 737.04           | .9             | 885.19           |

*Table 3.—Contents of Prisms 10 ft. wide and 100 ft. long.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
| 24.0           | 888.89           | 28.0           | 1037.04          |
| .1             | 892.59           | .1             | 1040.74          |
| .2             | 896.30           | .2             | 1044.44          |
| .3             | 900.00           | .3             | 1048.15          |
| .4             | 903.70           | .4             | 1051.85          |
| .5             | 907.41           | .5             | 1055.56          |
| .6             | 911.11           | .6             | 1059.26          |
| .7             | 914.81           | .7             | 1062.96          |
| .8             | 918.52           | .8             | 1066.67          |
| .9             | 922.22           | .9             | 1070.37          |
| 25.0           | 925.93           | 29.0           | 1074.07          |
| .1             | 929.63           | .1             | 1077.78          |
| .2             | 933.33           | .2             | 1081.48          |
| .3             | 937.04           | .3             | 1085.19          |
| .4             | 940.74           | .4             | 1088.89          |
| .5             | 944.44           | .5             | 1092.59          |
| .6             | 948.15           | .6             | 1096.30          |
| .7             | 951.85           | .7             | 1100.00          |
| .8             | 955.56           | .8             | 1103.70          |
| .9             | 959.26           | .9             | 1107.41          |
| 26.0           | 962.96           | 30.0           | 1111.11          |
| .1             | 966.67           | .1             | 1114.81          |
| .2             | 970.37           | .2             | 1118.52          |
| .3             | 974.07           | .3             | 1122.22          |
| .4             | 977.78           | .4             | 1125.93          |
| .5             | 981.48           | .5             | 1129.63          |
| .6             | 985.19           | .6             | 1133.33          |
| .7             | 988.89           | .7             | 1137.04          |
| .8             | 992.59           | .8             | 1140.74          |
| .9             | 996.30           | .9             | 1144.44          |
| 27.0           | 1000.00          | 31.0           | 1148.15          |
| .1             | 1003.70          | .1             | 1151.85          |
| .2             | 1007.41          | .2             | 1155.56          |
| .3             | 1011.11          | .3             | 1159.26          |
| .4             | 1014.81          | .4             | 1162.96          |
| .5             | 1018.52          | .5             | 1166.67          |
| .6             | 1022.22          | .6             | 1170.37          |
| .7             | 1025.93          | .7             | 1174.07          |
| .8             | 1029.63          | .8             | 1177.78          |
| .9             | 1033.33          | .9             | 1181.48          |

Table 3.—*Contents of Prisms 10 ft. wide and 100 ft. long.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
| 32.0           | 1185.19          | 36.0           | 1333.33          |
| .1             | 1188.89          | .1             | 1337.04          |
| .2             | 1192.59          | .2             | 1340.74          |
| .3             | 1196.30          | .3             | 1344.44          |
| .4             | 1200.00          | .4             | 1348.15          |
| .5             | 1203.70          | .5             | 1351.85          |
| .6             | 1207.41          | .6             | 1355.56          |
| .7             | 1211.11          | .7             | 1359.26          |
| .8             | 1214.81          | .8             | 1362.96          |
| .9             | 1218.52          | .9             | 1366.67          |
| 33.0           | 1222.22          | 37.0           | 1370.37          |
| .1             | 1225.93          | .1             | 1374.07          |
| .2             | 1229.63          | .2             | 1377.78          |
| .3             | 1233.33          | .3             | 1381.48          |
| .4             | 1237.04          | .4             | 1385.19          |
| .5             | 1240.74          | .5             | 1388.89          |
| .6             | 1244.44          | .6             | 1392.59          |
| .7             | 1248.15          | .7             | 1396.30          |
| .8             | 1251.85          | .8             | 1400.00          |
| .9             | 1255.56          | .9             | 1403.70          |
| 34.0           | 1259.26          | 38.0           | 1407.41          |
| .1             | 1262.96          | .1             | 1411.11          |
| .2             | 1266.67          | .2             | 1414.81          |
| .3             | 1270.37          | .3             | 1418.52          |
| .4             | 1274.07          | .4             | 1422.22          |
| .5             | 1277.78          | .5             | 1425.93          |
| .6             | 1281.48          | .6             | 1429.63          |
| .7             | 1285.19          | .7             | 1433.33          |
| .8             | 1288.89          | .8             | 1437.04          |
| .9             | 1292.59          | .9             | 1440.74          |
| 35.0           | 1296.30          | 39.0           | 1444.44          |
| .1             | 1300.00          | .1             | 1448.15          |
| .2             | 1303.70          | .2             | 1451.85          |
| .3             | 1307.41          | .3             | 1455.56          |
| .4             | 1311.11          | .4             | 1459.26          |
| .5             | 1314.81          | .5             | 1462.96          |
| .6             | 1318.52          | .6             | 1466.67          |
| .7             | 1322.22          | .7             | 1470.37          |
| .8             | 1325.93          | .8             | 1474.07          |
| .9             | 1329.63          | .9             | 1477.78          |

*Table 3.—Contents of Prisms 10 ft. wide and 100 ft. long.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
| 40.0           | 1481.48          | 44.0           | 1629.63          |
| .1             | 1485.19          | .1             | 1633.33          |
| .2             | 1488.89          | .2             | 1637.04          |
| .3             | 1492.59          | .3             | 1640.74          |
| .4             | 1496.30          | .4             | 1644.44          |
| .5             | 1500.00          | .5             | 1648.15          |
| .6             | 1503.70          | .6             | 1651.85          |
| .7             | 1507.41          | .7             | 1655.56          |
| .8             | 1511.11          | .8             | 1659.26          |
| .9             | 1514.81          | .9             | 1662.96          |
| 41.0           | 1518.52          | 45.0           | 1666.67          |
| .1             | 1522.22          | .1             | 1670.37          |
| .2             | 1525.93          | .2             | 1674.07          |
| .3             | 1529.63          | .3             | 1677.78          |
| .4             | 1533.33          | .4             | 1681.48          |
| .5             | 1537.04          | .5             | 1685.19          |
| .6             | 1540.74          | .6             | 1688.89          |
| .7             | 1544.44          | .7             | 1692.59          |
| .8             | 1548.15          | .8             | 1696.30          |
| .9             | 1551.85          | .9             | 1700.00          |
| 42.0           | 1555.56          | 46.0           | 1703.70          |
| .1             | 1559.26          | .1             | 1707.41          |
| .2             | 1562.96          | .2             | 1711.11          |
| .3             | 1566.67          | .3             | 1714.81          |
| .4             | 1570.37          | .4             | 1718.52          |
| .5             | 1574.07          | .5             | 1722.22          |
| .6             | 1577.78          | .6             | 1725.93          |
| .7             | 1581.48          | .7             | 1729.63          |
| .8             | 1585.19          | .8             | 1733.33          |
| .9             | 1588.89          | .9             | 1737.04          |
| 43.0           | 1592.59          | 47.0           | 1740.74          |
| .1             | 1596.30          | .1             | 1744.44          |
| .2             | 1600.00          | .2             | 1748.15          |
| .3             | 1603.70          | .3             | 1751.85          |
| .4             | 1607.41          | .4             | 1755.56          |
| .5             | 1611.11          | .5             | 1759.26          |
| .6             | 1614.81          | .6             | 1762.96          |
| .7             | 1618.52          | .7             | 1766.67          |
| .8             | 1622.22          | .8             | 1770.37          |
| .9             | 1625.93          | .9             | 1774.07          |

*Table 3.—Contents of Prisms 10 ft. wide and 100 ft. long.\**

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
| 48.0           | 1777.78          | 52.0           | 1925.93          |
| .1             | 1781.48          | .1             | 1929.63          |
| .2             | 1785.19          | .2             | 1933.33          |
| .3             | 1788.89          | .3             | 1937.04          |
| .4             | 1792.59          | .4             | 1940.74          |
| .5             | 1796.30          | .5             | 1944.44          |
| .6             | 1800.00          | .6             | 1948.15          |
| .7             | 1803.70          | .7             | 1951.85          |
| .8             | 1807.41          | .8             | 1955.56          |
| .9             | 1811.11          | .9             | 1959.26          |
| 49.0           | 1814.81          | 53.0           | 1962.96          |
| .1             | 1818.52          | .1             | 1966.67          |
| .2             | 1822.22          | .2             | 1970.37          |
| .3             | 1825.93          | .3             | 1974.07          |
| .4             | 1829.63          | .4             | 1977.78          |
| .5             | 1833.33          | .5             | 1981.48          |
| .6             | 1837.04          | .6             | 1985.19          |
| .7             | 1840.74          | .7             | 1988.89          |
| .8             | 1844.44          | .8             | 1992.59          |
| .9             | 1848.15          | .9             | 1996.30          |
| 50.0           | 1851.85          | 54.0           | 2000.00          |
| .1             | 1855.56          | .1             | 2003.70          |
| .2             | 1859.26          | .2             | 2007.41          |
| .3             | 1862.96          | .3             | 2011.11          |
| .4             | 1866.67          | .4             | 2014.81          |
| .5             | 1870.37          | .5             | 2018.52          |
| .6             | 1874.07          | .6             | 2022.22          |
| .7             | 1877.78          | .7             | 2025.93          |
| .8             | 1881.48          | .8             | 2029.63          |
| .9             | 1885.19          | .9             | 2033.33          |
| 51.0           | 1888.89          | 55.0           | 2037.04          |
| .1             | 1892.59          | .1             | 2040.74          |
| .2             | 1896.30          | .2             | 2044.44          |
| .3             | 1900.00          | .3             | 2048.15          |
| .4             | 1903.70          | .4             | 2051.85          |
| .5             | 1907.41          | .5             | 2055.56          |
| .6             | 1911.11          | .6             | 2059.26          |
| .7             | 1914.81          | .7             | 2062.96          |
| .8             | 1918.52          | .8             | 2066.67          |
| .9             | 1922.22          | .9             | 2070.37          |

*Table 3.—Contents of Prisms 10 ft. wide and 100 ft. long.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|
| 56.0           | 2074.07          | 58.0           | 2148.15          |
| .1             | 2077.78          | .1             | 2151.85          |
| .2             | 2061.48          | .2             | 2155.56          |
| .3             | 2055.19          | .3             | 2159.26          |
| .4             | 2088.89          | .4             | 2162.96          |
| .5             | 2092.59          | .5             | 2166.67          |
| .6             | 2096.30          | .6             | 2170.37          |
| .7             | 2100.00          | .7             | 2174.07          |
| .8             | 2103.70          | .8             | 2177.78          |
| .9             | 2107.41          | .9             | 2181.48          |
| 57.0           | 2111.11          | 59.0           | 2185.19          |
| .1             | 2114.81          | .1             | 2188.89          |
| .2             | 2118.52          | .2             | 2192.59          |
| .3             | 2122.22          | .3             | 2196.30          |
| .4             | 2125.93          | .4             | 2200.00          |
| .5             | 2129.63          | .5             | 2203.70          |
| .6             | 2133.33          | .6             | 2207.41          |
| .7             | 2137.04          | .7             | 2211.11          |
| .8             | 2140.74          | .8             | 2214.81          |
| .9             | 2144.44          | .9             | 2218.52          |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length</i> | <i>Depth.</i> |      |       |       |       | <i>Length.</i> |
|---------------|---------------|------|-------|-------|-------|----------------|
|               | 0.1           | 0.2  | 0.3   | 0.4   | 0.5   |                |
| 10            | .37           | .74  | 1.11  | 1.48  | 1.85  | 10             |
| 20            | .74           | 1.48 | 2.22  | 2.96  | 3.70  | 20             |
| 30            | 1.11          | 2.22 | 3.33  | 4.44  | 5.55  | 30             |
| 40            | 1.48          | 2.96 | 4.44  | 5.92  | 7.40  | 40             |
| 50            | 1.85          | 3.70 | 5.55  | 7.40  | 9.25  | 50             |
| 60            | 2.22          | 4.44 | 6.66  | 8.88  | 11.10 | 60             |
| 70            | 2.59          | 5.18 | 7.77  | 10.36 | 12.95 | 70             |
| 80            | 2.96          | 5.92 | 8.88  | 11.84 | 14.80 | 80             |
| 90            | 3.33          | 6.66 | 9.99  | 13.32 | 16.65 | 90             |
| 100           | 3.70          | 7.40 | 11.10 | 14.80 | 18.50 | 100            |

| <i>Length</i> | 0.6   | 0.7   | 0.8   | 0.9   | 1.0   | <i>Length.</i> |
|---------------|-------|-------|-------|-------|-------|----------------|
| 10            | 2.22  | 2.59  | 2.96  | 3.33  | 3.70  | 10             |
| 20            | 4.44  | 5.18  | 5.92  | 6.66  | 7.40  | 20             |
| 30            | 6.66  | 7.77  | 8.88  | 9.99  | 11.10 | 30             |
| 40            | 8.88  | 10.36 | 11.84 | 13.32 | 14.80 | 40             |
| 50            | 11.10 | 12.95 | 14.80 | 16.65 | 18.50 | 50             |
| 60            | 13.32 | 15.54 | 17.76 | 19.98 | 22.20 | 60             |
| 70            | 15.54 | 18.13 | 20.72 | 23.31 | 25.90 | 70             |
| 80            | 17.76 | 20.72 | 23.68 | 26.64 | 29.60 | 80             |
| 90            | 19.98 | 23.31 | 26.64 | 29.97 | 33.30 | 90             |
| 100           | 22.20 | 25.90 | 29.60 | 33.30 | 37.00 | 100            |

| <i>Length</i> | 1.1   | 1.2   | 1.3   | 1.4   | 1.5   | <i>Length.</i> |
|---------------|-------|-------|-------|-------|-------|----------------|
| 10            | 4.07  | 4.44  | 4.81  | 5.19  | 5.56  | 10             |
| 20            | 8.14  | 8.88  | 9.62  | 10.38 | 11.12 | 20             |
| 30            | 12.21 | 13.32 | 14.43 | 15.57 | 16.68 | 30             |
| 40            | 16.28 | 17.76 | 19.24 | 20.76 | 22.24 | 40             |
| 50            | 20.35 | 22.20 | 24.05 | 25.95 | 27.80 | 50             |
| 60            | 24.42 | 26.64 | 28.86 | 31.14 | 33.36 | 60             |
| 70            | 28.49 | 31.08 | 33.67 | 36.33 | 38.92 | 70             |
| 80            | 32.56 | 35.52 | 38.48 | 41.52 | 44.48 | 80             |
| 90            | 36.63 | 39.96 | 43.29 | 46.71 | 50.04 | 90             |
| 100           | 40.70 | 44.40 | 48.10 | 51.90 | 55.60 | 100            |



*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|-------|----------------|
|                | 1.6           | 1.7   | 1.8   | 1.9   | 2.0   |                |
| 10             | 5.93          | 6.30  | 6.67  | 7.04  | 7.41  | 10             |
| 20             | 11.86         | 12.60 | 13.34 | 14.08 | 14.82 | 20             |
| 30             | 17.79         | 18.90 | 20.01 | 21.12 | 22.23 | 30             |
| 40             | 23.72         | 25.20 | 26.68 | 28.16 | 29.64 | 40             |
| 50             | 29.65         | 31.50 | 33.35 | 35.20 | 37.05 | 50             |
| 60             | 35.58         | 37.80 | 40.02 | 42.24 | 44.46 | 60             |
| 70             | 41.51         | 44.10 | 46.69 | 49.28 | 51.87 | 70             |
| 80             | 47.44         | 50.40 | 53.36 | 56.32 | 59.28 | 80             |
| 90             | 53.37         | 56.70 | 60.03 | 63.36 | 66.69 | 90             |
| 100            | 59.30         | 63.00 | 66.70 | 70.40 | 74.10 | 100            |

| <i>Length.</i> | 2.1   | 2.2   | 2.3   | 2.4   | 2.5   | <i>Length.</i> |
|----------------|-------|-------|-------|-------|-------|----------------|
| 10             | 7.78  | 8.15  | 8.52  | 8.89  | 9.26  | 10             |
| 20             | 15.56 | 16.30 | 17.04 | 17.78 | 18.52 | 20             |
| 30             | 23.34 | 24.45 | 25.56 | 26.67 | 27.78 | 30             |
| 40             | 31.12 | 32.60 | 34.08 | 35.56 | 37.04 | 40             |
| 50             | 38.90 | 40.75 | 42.60 | 44.45 | 46.30 | 50             |
| 60             | 46.68 | 48.90 | 51.12 | 53.34 | 55.56 | 60             |
| 70             | 54.46 | 57.05 | 59.64 | 62.23 | 64.82 | 70             |
| 80             | 62.24 | 65.20 | 68.16 | 71.12 | 74.08 | 80             |
| 90             | 70.02 | 73.35 | 76.68 | 80.01 | 83.34 | 90             |
| 100            | 77.80 | 81.50 | 85.20 | 88.90 | 92.60 | 100            |

| <i>Length.</i> | 2.6   | 2.7    | 2.8    | 2.9    | 3.0    | <i>Length.</i> |
|----------------|-------|--------|--------|--------|--------|----------------|
| 10             | 9.63  | 10.00  | 10.37  | 10.74  | 11.11  | 10             |
| 20             | 19.26 | 20.00  | 20.74  | 21.48  | 22.22  | 20             |
| 30             | 28.89 | 30.00  | 31.11  | 32.22  | 33.33  | 30             |
| 40             | 38.52 | 40.00  | 41.48  | 42.96  | 44.44  | 40             |
| 50             | 48.15 | 50.00  | 51.85  | 53.70  | 55.55  | 50             |
| 60             | 57.78 | 60.00  | 62.22  | 64.44  | 66.66  | 60             |
| 70             | 67.41 | 70.00  | 72.59  | 75.18  | 77.77  | 70             |
| 80             | 77.04 | 80.00  | 82.96  | 85.92  | 88.88  | 80             |
| 90             | 86.67 | 90.00  | 93.33  | 96.66  | 99.99  | 90             |
| 100            | 96.30 | 100.00 | 103.70 | 107.40 | 111.10 | 100            |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 3.1           | 3.2    | 3.3    | 3.4    | 3.5    |                |
| 10             | 11.48         | 11.85  | 12.22  | 12.59  | 12.96  | 10             |
| 20             | 22.96         | 23.70  | 24.44  | 25.18  | 25.92  | 20             |
| 30             | 34.44         | 35.55  | 36.66  | 37.77  | 38.88  | 30             |
| 40             | 45.92         | 47.40  | 48.88  | 50.36  | 51.84  | 40             |
| 50             | 57.40         | 59.25  | 61.10  | 62.95  | 64.80  | 50             |
| 60             | 68.88         | 71.10  | 73.32  | 75.54  | 77.76  | 60             |
| 70             | 80.36         | 82.95  | 85.54  | 88.13  | 90.72  | 70             |
| 80             | 91.84         | 94.80  | 97.76  | 100.72 | 103.68 | 80             |
| 90             | 103.32        | 106.65 | 109.98 | 113.31 | 116.64 | 90             |
| 100            | 114.80        | 118.50 | 122.20 | 125.90 | 129.60 | 100            |

| <i>L.</i> | 3.6    | 3.7    | 3.8    | 3.9    | 4.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 13.33  | 13.70  | 14.07  | 14.44  | 14.82  | 10        |
| 20        | 26.66  | 27.40  | 28.14  | 28.88  | 29.64  | 20        |
| 30        | 39.99  | 41.10  | 42.21  | 43.32  | 44.46  | 30        |
| 40        | 53.32  | 54.80  | 56.28  | 57.76  | 59.28  | 40        |
| 50        | 66.65  | 68.50  | 70.35  | 72.20  | 74.10  | 50        |
| 60        | 79.98  | 82.20  | 84.42  | 86.64  | 88.92  | 60        |
| 70        | 93.31  | 95.90  | 98.49  | 101.08 | 103.74 | 70        |
| 80        | 106.64 | 109.60 | 112.56 | 115.52 | 118.56 | 80        |
| 90        | 119.97 | 123.30 | 126.63 | 129.96 | 133.38 | 90        |
| 100       | 133.30 | 137.00 | 140.70 | 144.40 | 148.20 | 100       |

| <i>L.</i> | 4.1    | 4.2    | 4.3    | 4.4    | 4.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 15.19  | 15.56  | 15.93  | 16.30  | 16.67  | 10        |
| 20        | 30.38  | 31.12  | 31.86  | 32.60  | 33.34  | 20        |
| 30        | 45.57  | 46.68  | 47.79  | 48.90  | 50.01  | 30        |
| 40        | 60.76  | 62.24  | 63.72  | 65.20  | 66.68  | 40        |
| 50        | 75.95  | 77.80  | 79.65  | 81.50  | 83.35  | 50        |
| 60        | 91.14  | 93.36  | 95.58  | 97.80  | 100.02 | 60        |
| 70        | 106.33 | 108.92 | 111.51 | 114.10 | 116.69 | 70        |
| 80        | 121.52 | 124.48 | 127.44 | 130.40 | 133.36 | 80        |
| 90        | 136.71 | 140.04 | 143.37 | 146.70 | 150.03 | 90        |
| 100       | 151.90 | 155.60 | 159.30 | 163.00 | 166.70 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 4.6           | 4.7    | 4.8    | 4.9    | 5.0    |                |
| 10             | 17.04         | 17.41  | 17.78  | 18.15  | 18.52  | 10             |
| 20             | 34.08         | 34.82  | 35.56  | 36.30  | 37.04  | 20             |
| 30             | 51.12         | 52.23  | 53.34  | 54.45  | 55.56  | 30             |
| 40             | 68.16         | 69.64  | 71.12  | 72.60  | 74.08  | 40             |
| 50             | 85.20         | 87.05  | 88.90  | 90.75  | 92.60  | 50             |
| 60             | 102.24        | 104.46 | 106.68 | 108.90 | 111.12 | 60             |
| 70             | 119.28        | 121.87 | 124.46 | 127.05 | 129.64 | 70             |
| 80             | 136.32        | 139.28 | 142.24 | 145.20 | 148.16 | 80             |
| 90             | 153.36        | 156.69 | 160.02 | 163.35 | 166.68 | 90             |
| 100            | 170.40        | 174.10 | 177.80 | 181.50 | 185.20 | 100            |

| <i>L.</i> | 5.1    | 5.2    | 5.3    | 5.4    | 5.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 18.89  | 19.26  | 19.63  | 20.00  | 20.37  | 10        |
| 20        | 37.78  | 38.52  | 39.26  | 40.00  | 40.74  | 20        |
| 30        | 56.67  | 57.78  | 58.89  | 60.00  | 61.11  | 30        |
| 40        | 75.56  | 77.04  | 78.52  | 80.00  | 81.48  | 40        |
| 50        | 94.45  | 96.30  | 98.15  | 100.00 | 101.85 | 50        |
| 60        | 113.34 | 115.56 | 117.78 | 120.00 | 122.22 | 60        |
| 70        | 132.23 | 134.82 | 137.41 | 140.00 | 142.59 | 70        |
| 80        | 151.12 | 154.08 | 157.04 | 160.00 | 162.96 | 80        |
| 90        | 170.01 | 173.34 | 176.67 | 180.00 | 183.33 | 90        |
| 100       | 188.90 | 192.60 | 196.30 | 200.00 | 203.70 | 100       |

| <i>L.</i> | 5.6    | 5.7    | 5.8    | 5.9    | 6.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 20.74  | 21.11  | 21.48  | 21.85  | 22.22  | 10        |
| 20        | 41.48  | 42.22  | 42.96  | 43.70  | 44.44  | 20        |
| 30        | 62.22  | 63.33  | 64.44  | 65.55  | 66.66  | 30        |
| 40        | 82.96  | 84.44  | 85.92  | 87.40  | 88.88  | 40        |
| 50        | 103.70 | 105.55 | 107.40 | 109.25 | 111.10 | 50        |
| 60        | 124.44 | 126.66 | 128.88 | 131.10 | 133.32 | 60        |
| 70        | 145.18 | 147.77 | 150.36 | 152.95 | 155.54 | 70        |
| 80        | 165.92 | 168.88 | 171.84 | 174.80 | 177.76 | 80        |
| 90        | 186.66 | 189.99 | 193.32 | 196.65 | 199.98 | 90        |
| 100       | 207.40 | 211.10 | 214.80 | 218.50 | 222.20 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 6.1           | 6.2    | 6.3    | 6.4    | 6.5    |                |
| 10             | 22.59         | 22.96  | 23.33  | 23.70  | 24.07  | 10             |
| 20             | 45.18         | 45.92  | 46.66  | 47.40  | 48.14  | 20             |
| 30             | 67.77         | 68.88  | 69.99  | 71.10  | 72.21  | 30             |
| 40             | 90.36         | 91.84  | 93.32  | 94.80  | 96.28  | 40             |
| 50             | 112.95        | 114.80 | 116.65 | 118.50 | 120.35 | 50             |
| 60             | 135.54        | 137.76 | 139.98 | 142.20 | 144.42 | 60             |
| 70             | 158.13        | 160.72 | 163.31 | 165.90 | 168.49 | 70             |
| 80             | 180.72        | 183.68 | 186.64 | 189.60 | 192.56 | 80             |
| 90             | 203.31        | 206.64 | 209.97 | 213.30 | 216.63 | 90             |
| 100            | 225.90        | 229.60 | 233.30 | 237.00 | 240.70 | 100            |

| <i>L.</i> | 6.6    | 6.7    | 6.8    | 6.9    | 7.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 24.44  | 24.82  | 25.19  | 25.56  | 25.93  | 10        |
| 20        | 48.88  | 49.64  | 50.38  | 51.12  | 51.86  | 20        |
| 30        | 73.32  | 74.46  | 75.57  | 76.68  | 77.79  | 30        |
| 40        | 97.76  | 99.28  | 100.76 | 102.24 | 103.72 | 40        |
| 50        | 122.20 | 124.10 | 125.95 | 127.80 | 129.65 | 50        |
| 60        | 146.64 | 148.92 | 151.14 | 153.36 | 155.58 | 60        |
| 70        | 171.08 | 173.74 | 176.33 | 178.92 | 181.51 | 70        |
| 80        | 195.52 | 198.56 | 201.52 | 204.48 | 207.44 | 80        |
| 90        | 219.96 | 223.38 | 226.71 | 230.04 | 233.37 | 90        |
| 100       | 244.40 | 248.20 | 251.90 | 255.60 | 259.30 | 100       |

| <i>L.</i> | 7.1    | 7.2    | 7.3    | 7.4    | 7.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 26.30  | 26.67  | 27.04  | 27.41  | 27.78  | 10        |
| 20        | 52.60  | 53.34  | 54.08  | 54.82  | 55.56  | 20        |
| 30        | 78.90  | 80.01  | 81.12  | 82.23  | 83.34  | 30        |
| 40        | 105.20 | 106.68 | 108.16 | 109.64 | 111.12 | 40        |
| 50        | 131.50 | 133.35 | 135.20 | 137.05 | 138.90 | 50        |
| 60        | 157.80 | 160.02 | 162.24 | 164.46 | 166.68 | 60        |
| 70        | 184.10 | 186.69 | 189.28 | 191.87 | 194.46 | 70        |
| 80        | 210.40 | 213.36 | 216.32 | 219.28 | 222.24 | 80        |
| 90        | 236.70 | 240.03 | 243.36 | 246.69 | 250.02 | 90        |
| 100       | 263.00 | 266.70 | 270.40 | 274.10 | 277.80 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 7.6           | 7.7    | 7.8    | 7.9    | 8.0    |                |
| 10             | 28.15         | 28.52  | 28.89  | 29.26  | 29.63  | 10             |
| 20             | 56.30         | 57.04  | 57.78  | 58.52  | 59.26  | 20             |
| 30             | 84.45         | 85.56  | 86.67  | 87.78  | 88.89  | 30             |
| 40             | 112.60        | 114.08 | 115.56 | 117.04 | 118.52 | 40             |
| 50             | 140.75        | 142.60 | 144.45 | 146.30 | 148.15 | 50             |
| 60             | 168.90        | 171.12 | 173.34 | 175.56 | 177.78 | 60             |
| 70             | 197.05        | 199.64 | 202.23 | 204.82 | 207.41 | 70             |
| 80             | 225.20        | 228.16 | 231.12 | 234.08 | 237.04 | 80             |
| 90             | 253.35        | 256.68 | 260.01 | 263.34 | 266.67 | 90             |
| 100            | 281.50        | 285.20 | 288.90 | 292.60 | 296.30 | 100            |

| <i>L.</i> | 8.1    | 8.2    | 8.3    | 8.4    | 8.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 30.00  | 30.37  | 30.74  | 31.11  | 31.48  | 10        |
| 20        | 60.00  | 60.74  | 61.48  | 62.22  | 62.96  | 20        |
| 30        | 90.00  | 91.11  | 92.22  | 93.33  | 94.44  | 30        |
| 40        | 120.00 | 121.48 | 122.96 | 124.44 | 125.92 | 40        |
| 50        | 150.00 | 151.85 | 153.70 | 155.55 | 157.40 | 50        |
| 60        | 180.00 | 182.22 | 184.44 | 186.66 | 188.88 | 60        |
| 70        | 210.00 | 212.59 | 215.18 | 217.77 | 220.36 | 70        |
| 80        | 240.00 | 242.96 | 245.92 | 248.88 | 251.84 | 80        |
| 90        | 270.00 | 273.33 | 276.66 | 279.99 | 283.32 | 90        |
| 100       | 300.00 | 303.70 | 307.40 | 311.10 | 314.80 | 100       |

| <i>L.</i> | 8.6    | 8.7    | 8.8    | 8.9    | 9.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 31.85  | 32.22  | 32.59  | 32.96  | 33.33  | 10        |
| 20        | 63.70  | 64.44  | 65.18  | 65.92  | 66.66  | 20        |
| 30        | 95.55  | 96.66  | 97.77  | 98.88  | 99.99  | 30        |
| 40        | 127.40 | 128.88 | 130.36 | 131.84 | 133.32 | 40        |
| 50        | 159.25 | 161.10 | 162.95 | 164.80 | 166.65 | 50        |
| 60        | 191.10 | 193.32 | 195.54 | 197.76 | 199.98 | 60        |
| 70        | 222.95 | 225.54 | 228.13 | 230.72 | 233.31 | 70        |
| 80        | 254.80 | 257.76 | 260.72 | 263.68 | 266.64 | 80        |
| 90        | 286.65 | 289.98 | 293.31 | 296.64 | 299.97 | 90        |
| 100       | 318.50 | 322.20 | 325.90 | 329.60 | 333.30 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 9.1           | 9.2    | 9.3    | 9.4    | 9.5    |                |
| 10             | 33.70         | 34.07  | 34.44  | 34.82  | 35.19  | 10             |
| 20             | 67.40         | 68.14  | 68.88  | 69.64  | 70.38  | 20             |
| 30             | 101.10        | 102.21 | 103.32 | 104.46 | 105.57 | 30             |
| 40             | 134.80        | 136.28 | 137.76 | 139.28 | 140.76 | 40             |
| 50             | 168.50        | 170.35 | 172.20 | 174.10 | 175.95 | 50             |
| 60             | 202.20        | 204.42 | 206.64 | 208.92 | 211.14 | 60             |
| 70             | 235.90        | 238.49 | 241.08 | 243.74 | 246.33 | 70             |
| 80             | 269.60        | 272.56 | 275.52 | 278.56 | 281.52 | 80             |
| 90             | 303.30        | 306.63 | 309.96 | 313.38 | 316.71 | 90             |
| 100            | 337.00        | 340.70 | 344.40 | 348.20 | 351.90 | 100            |

| <i>L.</i> | 9.6    | 9.7    | 9.8    | 9.9    | 10.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 35.56  | 35.93  | 36.30  | 36.67  | 37.04  | 10        |
| 20        | 71.12  | 71.86  | 72.60  | 73.34  | 74.08  | 20        |
| 30        | 106.68 | 107.79 | 108.90 | 110.01 | 111.12 | 30        |
| 40        | 142.24 | 143.72 | 145.20 | 146.68 | 148.16 | 40        |
| 50        | 177.80 | 179.65 | 181.50 | 183.35 | 185.20 | 50        |
| 60        | 213.36 | 215.58 | 217.80 | 220.02 | 222.24 | 60        |
| 70        | 248.92 | 251.51 | 254.10 | 256.69 | 259.28 | 70        |
| 80        | 284.48 | 287.44 | 290.40 | 293.36 | 296.32 | 80        |
| 90        | 320.04 | 323.37 | 326.70 | 330.03 | 333.36 | 90        |
| 100       | 355.60 | 359.30 | 363.00 | 366.70 | 370.40 | 100       |

| <i>L.</i> | 10.1   | 10.2   | 10.3   | 10.4   | 10.5   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 37.41  | 37.78  | 38.15  | 38.52  | 38.89  | 10        |
| 20        | 74.82  | 75.56  | 76.30  | 77.04  | 77.78  | 20        |
| 30        | 112.23 | 113.34 | 114.45 | 115.56 | 116.67 | 30        |
| 40        | 149.64 | 151.12 | 152.60 | 154.08 | 155.56 | 40        |
| 50        | 187.05 | 188.90 | 190.75 | 192.60 | 194.45 | 50        |
| 60        | 224.46 | 226.68 | 228.90 | 231.12 | 233.34 | 60        |
| 70        | 261.87 | 264.46 | 267.05 | 269.64 | 272.23 | 70        |
| 80        | 299.28 | 302.24 | 305.20 | 308.16 | 311.12 | 80        |
| 90        | 336.69 | 340.02 | 343.35 | 346.68 | 350.01 | 90        |
| 100       | 374.10 | 377.80 | 381.50 | 385.20 | 388.90 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 10.6          | 10.7   | 10.8   | 10.9   | 11.0   |                |
| 10             | 39.26         | 39.63  | 40.00  | 40.37  | 40.74  | 10             |
| 20             | 78.52         | 79.26  | 80.00  | 80.74  | 81.48  | 20             |
| 30             | 117.78        | 118.89 | 120.00 | 121.11 | 122.22 | 30             |
| 40             | 157.04        | 158.52 | 160.00 | 161.48 | 162.96 | 40             |
| 50             | 196.30        | 198.15 | 200.00 | 201.85 | 203.70 | 50             |
| 60             | 235.56        | 237.78 | 240.00 | 242.22 | 244.44 | 60             |
| 70             | 274.82        | 277.41 | 280.00 | 282.59 | 285.18 | 70             |
| 80             | 314.08        | 317.04 | 320.00 | 322.96 | 325.92 | 80             |
| 90             | 353.34        | 356.67 | 360.00 | 363.33 | 366.66 | 90             |
| 100            | 392.60        | 396.30 | 400.00 | 403.70 | 407.40 | 100            |

| <i>L.</i> | 11.1   | 11.2   | 11.3   | 11.4   | 11.5   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 41.11  | 41.48  | 41.85  | 42.22  | 42.59  | 10        |
| 20        | 82.22  | 82.96  | 83.70  | 84.44  | 85.18  | 20        |
| 30        | 123.33 | 124.44 | 125.55 | 126.66 | 127.77 | 30        |
| 40        | 164.44 | 165.92 | 167.40 | 168.88 | 170.36 | 40        |
| 50        | 205.55 | 207.40 | 209.25 | 211.10 | 212.95 | 50        |
| 60        | 246.66 | 248.88 | 251.10 | 253.32 | 255.54 | 60        |
| 70        | 287.77 | 290.36 | 292.95 | 295.54 | 298.13 | 70        |
| 80        | 328.88 | 331.84 | 334.80 | 337.76 | 340.72 | 80        |
| 90        | 369.99 | 373.32 | 376.65 | 379.98 | 383.31 | 90        |
| 100       | 411.10 | 414.80 | 418.50 | 422.20 | 425.90 | 100       |

| <i>L.</i> | 11.6   | 11.7   | 11.8   | 11.9   | 12.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 42.96  | 43.33  | 43.70  | 44.07  | 44.44  | 10        |
| 20        | 85.92  | 86.66  | 87.40  | 88.14  | 88.88  | 20        |
| 30        | 128.88 | 129.99 | 131.10 | 132.21 | 133.32 | 30        |
| 40        | 171.84 | 173.32 | 174.80 | 176.28 | 177.76 | 40        |
| 50        | 214.80 | 216.65 | 218.50 | 220.35 | 222.20 | 50        |
| 60        | 257.76 | 259.98 | 262.20 | 264.42 | 266.64 | 60        |
| 70        | 300.72 | 303.31 | 305.90 | 308.49 | 311.08 | 70        |
| 80        | 343.68 | 346.64 | 349.60 | 352.56 | 355.52 | 80        |
| 90        | 386.64 | 389.97 | 393.30 | 396.63 | 399.96 | 90        |
| 100       | 429.60 | 433.30 | 437.00 | 440.70 | 444.40 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 12.1          | 12.2   | 12.3   | 12.4   | 12.5   |                |
| 10             | 44.81         | 45.19  | 45.56  | 45.93  | 46.30  | 10             |
| 20             | 89.62         | 90.38  | 91.12  | 91.86  | 92.60  | 20             |
| 30             | 134.43        | 135.57 | 136.68 | 137.79 | 138.90 | 30             |
| 40             | 179.24        | 180.76 | 182.24 | 183.72 | 185.20 | 40             |
| 50             | 224.05        | 225.95 | 227.80 | 229.65 | 231.50 | 50             |
| 60             | 268.86        | 271.14 | 273.36 | 275.58 | 277.80 | 60             |
| 70             | 313.67        | 316.33 | 318.92 | 321.51 | 324.10 | 70             |
| 80             | 358.48        | 361.52 | 364.48 | 367.44 | 370.40 | 80             |
| 90             | 403.29        | 406.71 | 410.04 | 413.37 | 416.70 | 90             |
| 100            | 448.10        | 451.90 | 455.60 | 459.30 | 463.00 | 100            |

| <i>L.</i> | 12.6   | 12.7   | 12.8   | 12.9   | 13.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 46.67  | 47.04  | 47.41  | 47.78  | 48.15  | 10        |
| 20        | 93.34  | 94.08  | 94.82  | 95.56  | 96.30  | 20        |
| 30        | 140.01 | 141.12 | 142.23 | 143.34 | 144.45 | 30        |
| 40        | 186.68 | 188.16 | 189.64 | 191.12 | 192.60 | 40        |
| 50        | 233.35 | 235.20 | 237.05 | 238.90 | 240.75 | 50        |
| 60        | 280.02 | 282.24 | 284.46 | 286.68 | 288.90 | 60        |
| 70        | 326.69 | 329.28 | 331.87 | 334.46 | 337.05 | 70        |
| 80        | 373.36 | 376.32 | 379.28 | 382.24 | 385.20 | 80        |
| 90        | 420.03 | 423.36 | 426.69 | 430.02 | 433.35 | 90        |
| 100       | 466.70 | 470.40 | 474.10 | 477.80 | 481.50 | 100       |

| <i>L.</i> | 13.1   | 13.2   | 13.3   | 13.4   | 13.5   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 48.52  | 48.89  | 49.26  | 49.63  | 50.00  | 10        |
| 20        | 97.04  | 97.78  | 98.52  | 99.26  | 100.00 | 20        |
| 30        | 145.56 | 146.67 | 147.78 | 148.89 | 150.00 | 30        |
| 40        | 194.08 | 195.56 | 197.04 | 198.52 | 200.00 | 40        |
| 50        | 242.60 | 244.45 | 246.30 | 248.15 | 250.00 | 50        |
| 60        | 291.12 | 293.34 | 295.56 | 297.78 | 300.00 | 60        |
| 70        | 339.64 | 342.23 | 344.82 | 347.41 | 350.00 | 70        |
| 80        | 388.16 | 391.12 | 394.08 | 397.04 | 400.00 | 80        |
| 90        | 436.68 | 440.01 | 443.34 | 446.67 | 450.00 | 90        |
| 100       | 485.20 | 488.90 | 492.60 | 496.30 | 500.00 | 100       |



*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 13.6          | 13.7   | 13.8   | 13.9   | 14.0   |                |
| 10             | 50.37         | 50.74  | 51.11  | 51.48  | 51.85  | 10             |
| 20             | 100.74        | 101.48 | 102.22 | 102.96 | 103.70 | 20             |
| 30             | 151.11        | 152.22 | 153.33 | 154.44 | 155.55 | 30             |
| 40             | 201.48        | 202.96 | 204.44 | 205.92 | 207.40 | 40             |
| 50             | 251.85        | 253.70 | 255.55 | 257.40 | 259.25 | 50             |
| 60             | 302.22        | 304.44 | 306.66 | 308.88 | 311.10 | 60             |
| 70             | 352.59        | 355.18 | 357.77 | 360.36 | 362.95 | 70             |
| 80             | 402.96        | 405.92 | 408.88 | 411.84 | 414.80 | 80             |
| 90             | 453.33        | 456.66 | 459.99 | 463.32 | 466.65 | 90             |
| 100            | 503.70        | 507.40 | 511.10 | 514.80 | 518.50 | 100            |

| <i>L.</i> | 14.1   | 14.2   | 14.3   | 14.4   | 14.5   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 52.22  | 52.59  | 52.96  | 53.33  | 53.70  | 10        |
| 20        | 104.44 | 105.18 | 105.92 | 106.66 | 107.40 | 20        |
| 30        | 156.66 | 157.77 | 158.88 | 159.99 | 161.10 | 30        |
| 40        | 208.88 | 210.36 | 211.84 | 213.32 | 214.80 | 40        |
| 50        | 261.10 | 262.95 | 264.80 | 266.65 | 268.50 | 50        |
| 60        | 313.32 | 315.54 | 317.76 | 319.98 | 322.20 | 60        |
| 70        | 365.54 | 368.13 | 370.72 | 373.31 | 375.90 | 70        |
| 80        | 417.76 | 420.72 | 423.68 | 426.64 | 429.60 | 80        |
| 90        | 469.98 | 473.31 | 476.64 | 479.97 | 483.30 | 90        |
| 100       | 522.20 | 525.90 | 529.60 | 533.30 | 537.00 | 100       |

| <i>L.</i> | 14.6   | 14.7   | 14.8   | 14.9   | 15.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 54.07  | 54.44  | 54.82  | 55.19  | 55.56  | 10        |
| 20        | 108.14 | 108.88 | 109.64 | 110.38 | 111.12 | 20        |
| 30        | 162.21 | 163.32 | 164.46 | 165.57 | 166.68 | 30        |
| 40        | 216.28 | 217.76 | 219.28 | 220.76 | 222.24 | 40        |
| 50        | 270.35 | 272.20 | 274.10 | 275.95 | 277.80 | 50        |
| 60        | 324.42 | 326.64 | 328.92 | 331.14 | 333.36 | 60        |
| 70        | 378.49 | 381.08 | 383.74 | 386.33 | 388.92 | 70        |
| 80        | 432.56 | 435.52 | 438.56 | 441.52 | 444.48 | 80        |
| 90        | 486.63 | 489.96 | 493.38 | 496.71 | 500.04 | 90        |
| 100       | 540.70 | 544.40 | 548.20 | 551.90 | 555.60 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 15.1          | 15.2   | 15.3   | 15.4   | 15.5   |                |
| 10             | 55.93         | 56.30  | 56.67  | 57.04  | 57.41  | 10             |
| 20             | 111.86        | 112.60 | 113.34 | 114.08 | 114.82 | 20             |
| 30             | 167.79        | 168.90 | 170.01 | 171.12 | 172.23 | 30             |
| 40             | 223.72        | 225.20 | 226.68 | 228.16 | 229.64 | 40             |
| 50             | 279.65        | 281.50 | 283.35 | 285.20 | 287.05 | 50             |
| 60             | 335.58        | 337.80 | 340.02 | 342.24 | 344.46 | 60             |
| 70             | 391.51        | 394.10 | 396.69 | 399.28 | 401.87 | 70             |
| 80             | 447.44        | 450.40 | 453.36 | 456.32 | 459.28 | 80             |
| 90             | 503.37        | 506.70 | 510.03 | 513.36 | 516.69 | 90             |
| 100            | 559.30        | 563.00 | 566.70 | 570.40 | 574.10 | 100            |

| <i>L.</i> | 15.6   | 15.7   | 15.8   | 15.9   | 16.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 57.78  | 58.15  | 58.52  | 58.89  | 59.26  | 10        |
| 20        | 115.56 | 116.30 | 117.04 | 117.78 | 118.52 | 20        |
| 30        | 173.34 | 174.45 | 175.56 | 176.67 | 177.78 | 30        |
| 40        | 231.12 | 232.60 | 234.08 | 235.56 | 237.04 | 40        |
| 50        | 288.90 | 290.75 | 292.60 | 294.45 | 296.30 | 50        |
| 60        | 346.68 | 348.90 | 351.12 | 353.34 | 355.56 | 60        |
| 70        | 404.46 | 407.05 | 409.64 | 412.23 | 414.82 | 70        |
| 80        | 462.24 | 465.20 | 468.16 | 471.12 | 474.08 | 80        |
| 90        | 520.02 | 523.35 | 526.68 | 530.01 | 533.34 | 90        |
| 100       | 577.80 | 581.50 | 585.20 | 588.90 | 592.60 | 100       |

| <i>L.</i> | 16.1   | 16.2   | 16.3   | 16.4   | 16.5   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 59.63  | 60.00  | 60.37  | 60.74  | 61.11  | 10        |
| 20        | 119.26 | 120.00 | 120.74 | 121.48 | 122.22 | 20        |
| 30        | 178.89 | 180.00 | 181.11 | 182.22 | 183.33 | 30        |
| 40        | 238.52 | 240.00 | 241.48 | 242.96 | 244.44 | 40        |
| 50        | 298.15 | 300.00 | 301.85 | 303.70 | 305.55 | 50        |
| 60        | 357.78 | 360.00 | 362.22 | 364.44 | 366.66 | 60        |
| 70        | 417.41 | 420.00 | 422.59 | 425.18 | 427.77 | 70        |
| 80        | 477.04 | 480.00 | 482.96 | 485.92 | 488.88 | 80        |
| 90        | 536.67 | 540.00 | 543.33 | 546.66 | 549.99 | 90        |
| 100       | 596.30 | 600.00 | 603.70 | 607.40 | 611.10 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 16.6          | 16.7   | 16.8   | 16.9   | 17.0   |                |
| 10             | 61.48         | 61.85  | 62.22  | 62.59  | 62.96  | 10             |
| 20             | 122.96        | 123.70 | 124.44 | 125.18 | 125.92 | 20             |
| 30             | 184.44        | 185.55 | 186.66 | 187.77 | 188.88 | 30             |
| 40             | 245.92        | 247.40 | 248.88 | 250.36 | 251.84 | 40             |
| 50             | 307.40        | 309.25 | 311.10 | 312.95 | 314.80 | 50             |
| 60             | 368.88        | 371.10 | 373.32 | 375.54 | 377.76 | 60             |
| 70             | 430.36        | 432.95 | 435.54 | 438.13 | 440.72 | 70             |
| 80             | 491.84        | 494.80 | 497.76 | 500.72 | 503.68 | 80             |
| 90             | 553.32        | 556.65 | 559.98 | 563.31 | 566.64 | 90             |
| 100            | 614.80        | 618.50 | 622.20 | 625.90 | 629.60 | 100            |

| <i>L.</i> | 17.1   | 17.2   | 17.3   | 17.4   | 17.5   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 63.33  | 63.70  | 64.07  | 64.44  | 64.81  | 10        |
| 20        | 126.66 | 127.40 | 128.14 | 128.88 | 129.62 | 20        |
| 30        | 189.99 | 191.10 | 192.21 | 193.32 | 194.43 | 30        |
| 40        | 253.32 | 254.80 | 256.28 | 257.76 | 259.24 | 40        |
| 50        | 316.65 | 318.50 | 320.35 | 322.20 | 324.05 | 50        |
| 60        | 379.98 | 382.20 | 384.42 | 386.64 | 388.86 | 60        |
| 70        | 443.31 | 445.90 | 448.49 | 451.08 | 453.67 | 70        |
| 80        | 506.64 | 509.60 | 512.56 | 515.52 | 518.48 | 80        |
| 90        | 569.97 | 573.30 | 576.63 | 579.96 | 583.29 | 90        |
| 100       | 633.30 | 637.00 | 640.70 | 644.40 | 648.10 | 100       |

| <i>L.</i> | 17.6   | 17.7   | 17.8   | 17.9   | 18.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 65.19  | 65.56  | 65.93  | 66.30  | 66.67  | 10        |
| 20        | 130.38 | 131.12 | 131.86 | 132.60 | 133.34 | 20        |
| 30        | 195.57 | 196.68 | 197.79 | 198.90 | 200.01 | 30        |
| 40        | 260.76 | 262.24 | 263.72 | 265.20 | 266.68 | 40        |
| 50        | 325.95 | 327.80 | 329.65 | 331.50 | 333.35 | 50        |
| 60        | 391.14 | 393.36 | 395.58 | 397.80 | 400.02 | 60        |
| 70        | 456.33 | 458.92 | 461.51 | 464.10 | 466.69 | 70        |
| 80        | 521.52 | 524.48 | 527.44 | 530.40 | 533.36 | 80        |
| 90        | 586.71 | 590.04 | 593.37 | 596.70 | 600.03 | 90        |
| 100       | 651.90 | 655.60 | 659.30 | 663.00 | 666.70 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 18.1          | 18.2   | 18.3   | 18.4   | 18.5   |                |
| 10             | 67.04         | 67.41  | 67.78  | 68.15  | 68.52  | 10             |
| 20             | 134.08        | 134.82 | 135.56 | 136.80 | 137.04 | 20             |
| 30             | 201.12        | 202.23 | 203.34 | 204.45 | 205.56 | 30             |
| 40             | 268.16        | 269.64 | 271.12 | 272.60 | 274.08 | 40             |
| 50             | 335.20        | 337.05 | 338.90 | 340.75 | 342.60 | 50             |
| 60             | 402.24        | 404.46 | 406.68 | 408.90 | 411.12 | 60             |
| 70             | 469.28        | 471.87 | 474.46 | 477.05 | 479.64 | 70             |
| 80             | 536.32        | 539.28 | 542.24 | 545.20 | 548.16 | 80             |
| 90             | 603.36        | 606.69 | 610.02 | 613.35 | 616.68 | 90             |
| 100            | 670.40        | 674.10 | 677.80 | 681.50 | 685.20 | 100            |

| <i>L.</i> | 18.6   | 18.7   | 18.8   | 18.9   | 19.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 68.89  | 69.26  | 69.63  | 70.00  | 70.37  | 10        |
| 20        | 137.78 | 138.52 | 139.26 | 140.00 | 140.74 | 20        |
| 30        | 206.67 | 207.78 | 208.89 | 210.00 | 211.11 | 30        |
| 40        | 275.56 | 277.04 | 278.52 | 280.00 | 281.48 | 40        |
| 50        | 344.45 | 346.30 | 348.15 | 350.00 | 351.85 | 50        |
| 60        | 413.34 | 415.56 | 417.78 | 420.00 | 422.22 | 60        |
| 70        | 482.23 | 484.82 | 487.41 | 490.00 | 492.59 | 70        |
| 80        | 551.12 | 554.08 | 557.04 | 560.00 | 562.96 | 80        |
| 90        | 620.01 | 623.34 | 626.67 | 630.00 | 633.33 | 90        |
| 100       | 688.90 | 692.60 | 696.30 | 700.00 | 703.70 | 100       |

| <i>L.</i> | 19.1   | 19.2   | 19.3   | 19.4   | 19.5   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 70.74  | 71.11  | 71.48  | 71.85  | 72.22  | 10        |
| 20        | 141.48 | 142.22 | 142.96 | 143.70 | 144.44 | 20        |
| 30        | 212.22 | 213.33 | 214.44 | 215.55 | 216.66 | 30        |
| 40        | 282.96 | 284.44 | 285.92 | 287.40 | 288.88 | 40        |
| 50        | 353.70 | 355.55 | 357.40 | 359.25 | 361.10 | 50        |
| 60        | 424.44 | 426.66 | 428.88 | 431.10 | 433.32 | 60        |
| 70        | 495.18 | 497.77 | 500.36 | 502.95 | 505.54 | 70        |
| 80        | 565.92 | 568.88 | 571.84 | 574.80 | 577.76 | 80        |
| 90        | 636.66 | 639.99 | 643.32 | 646.65 | 649.98 | 90        |
| 100       | 707.40 | 711.10 | 714.80 | 718.50 | 722.20 | 100       |

*Supplement to table 3.—Prisms 10 feet wide.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 19.6          | 19.7   | 19.8   | 19.9   | 20.0   |                |
| 10             | 72.59         | 72.96  | 73.33  | 73.70  | 74.07  | 10             |
| 20             | 145.18        | 145.92 | 146.66 | 147.40 | 148.14 | 20             |
| 30             | 217.77        | 218.88 | 219.99 | 221.10 | 222.21 | 30             |
| 40             | 290.36        | 291.84 | 293.32 | 294.80 | 296.28 | 40             |
| 50             | 362.95        | 364.80 | 366.65 | 368.50 | 370.35 | 50             |
| 60             | 435.54        | 437.76 | 439.98 | 442.20 | 444.42 | 60             |
| 70             | 508.13        | 510.72 | 513.31 | 515.90 | 518.49 | 70             |
| 80             | 580.72        | 583.68 | 586.64 | 589.60 | 592.56 | 80             |
| 90             | 653.31        | 656.64 | 659.97 | 663.30 | 666.63 | 90             |
| 100            | 725.90        | 729.60 | 733.30 | 737.00 | 740.70 | 100            |

Table 4.—*Contents of Slopes, for a slope of  $2\frac{1}{2}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
|                |                  |           | 4.0            | 148.15           | 7.50      |
| 0.1            | .09              | .28       | .1             | 155.65           | 7.69      |
| .2             | .37              | .46       | .2             | 163.33           | 7.87      |
| .3             | .63              | .65       | .3             | 171.20           | 8.06      |
| .4             | 1.48             | .83       | .4             | 179.26           | 8.24      |
| .5             | 2.31             | 1.02      | .5             | 187.50           | 8.43      |
| .6             | 3.33             | 1.20      | .6             | 195.93           | 8.61      |
| .7             | 4.54             | 1.39      | .7             | 204.54           | 8.80      |
| .8             | 5.93             | 1.57      | .8             | 213.33           | 8.98      |
| .9             | 7.50             | 1.76      | .9             | 222.31           | 9.17      |
| 1.0            | 9.26             | 1.94      | 5.0            | 231.48           | 9.35      |
| .1             | 11.20            | 2.13      | .1             | 240.83           | 9.54      |
| .2             | 13.33            | 2.31      | .2             | 250.37           | 9.72      |
| .3             | 15.65            | 2.50      | .3             | 260.09           | 9.91      |
| .4             | 18.15            | 2.69      | .4             | 270.00           | 10.09     |
| .5             | 20.83            | 2.87      | .5             | 280.09           | 10.28     |
| .6             | 23.70            | 3.06      | .6             | 290.37           | 10.46     |
| .7             | 26.76            | 3.24      | .7             | 300.83           | 10.65     |
| .8             | 30.00            | 3.43      | .8             | 311.48           | 10.83     |
| .9             | 33.43            | 3.61      | .9             | 322.31           | 11.02     |
| 2.0            | 37.04            | 3.80      | 6.0            | 333.33           | 11.20     |
| .1             | 40.83            | 3.98      | .1             | 344.54           | 11.39     |
| .2             | 44.81            | 4.17      | .2             | 355.93           | 11.57     |
| .3             | 48.98            | 4.35      | .3             | 367.50           | 11.76     |
| .4             | 53.33            | 4.54      | .4             | 379.26           | 11.94     |
| .5             | 57.87            | 4.72      | .5             | 391.20           | 12.13     |
| .6             | 62.59            | 4.91      | .6             | 403.33           | 12.31     |
| .7             | 67.50            | 5.09      | .7             | 415.65           | 12.50     |
| .8             | 72.59            | 5.28      | .8             | 428.15           | 12.69     |
| .9             | 77.87            | 5.46      | .9             | 440.83           | 12.87     |
| 3.0            | 83.33            | 5.65      | 7.0            | 453.70           | 13.06     |
| .1             | 88.98            | 5.83      | .1             | 466.76           | 13.24     |
| .2             | 94.81            | 6.02      | .2             | 480.00           | 13.43     |
| .3             | 100.83           | 6.20      | .3             | 493.43           | 13.61     |
| .4             | 107.04           | 6.39      | .4             | 507.04           | 13.80     |
| .5             | 113.43           | 6.57      | .5             | 520.83           | 13.98     |
| .6             | 120.00           | 6.76      | .6             | 534.81           | 14.17     |
| .7             | 126.76           | 6.94      | .7             | 548.98           | 14.35     |
| .8             | 133.70           | 7.13      | .8             | 563.33           | 14.54     |
| .9             | 140.83           | 7.31      | .9             | 577.87           | 14.72     |

Table 4.—*Contents of Slopes, for a slope of  $2\frac{1}{2}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 8.0            | 592.59           | 14.91     | 12.0           | 1333.33          | 22.31     |
| .1             | 607.50           | 15.09     | .1             | 1355.65          | 22.50     |
| .2             | 622.59           | 15.28     | .2             | 1378.15          | 22.69     |
| .3             | 637.87           | 15.46     | .3             | 1400.83          | 22.87     |
| .4             | 653.33           | 15.65     | .4             | 1423.70          | 23.06     |
| .5             | 668.98           | 15.83     | .5             | 1446.76          | 23.23     |
| .6             | 684.81           | 16.02     | .6             | 1470.00          | 23.43     |
| .7             | 700.83           | 16.20     | .7             | 1493.43          | 23.61     |
| .8             | 717.04           | 16.39     | .8             | 1517.04          | 23.80     |
| .9             | 733.43           | 16.57     | .9             | 1540.83          | 23.98     |
| 9.0            | 750.00           | 16.76     | 13.0           | 1564.81          | 24.17     |
| .1             | 766.76           | 16.94     | .1             | 1588.98          | 24.35     |
| .2             | 783.70           | 17.13     | .2             | 1613.33          | 24.54     |
| .3             | 800.83           | 17.31     | .3             | 1637.87          | 24.72     |
| .4             | 818.15           | 17.50     | .4             | 1662.59          | 24.91     |
| .5             | 835.65           | 17.69     | .5             | 1687.50          | 25.09     |
| .6             | 853.33           | 17.87     | .6             | 1712.59          | 25.28     |
| .7             | 871.20           | 18.06     | .7             | 1737.87          | 25.46     |
| .8             | 889.26           | 18.24     | .8             | 1763.33          | 25.65     |
| .9             | 907.50           | 18.43     | .9             | 1788.98          | 25.83     |
| 10.0           | 925.93           | 18.61     | 14.0           | 1814.81          | 26.02     |
| .1             | 944.54           | 18.80     | .1             | 1840.83          | 26.20     |
| .2             | 963.33           | 18.98     | .2             | 1867.04          | 26.39     |
| .3             | 982.31           | 19.17     | .3             | 1893.43          | 26.57     |
| .4             | 1001.48          | 19.35     | .4             | 1920.00          | 26.76     |
| .5             | 1020.83          | 19.54     | .5             | 1946.76          | 26.94     |
| .6             | 1040.37          | 19.72     | .6             | 1973.70          | 27.13     |
| .7             | 1060.09          | 19.91     | .7             | 2000.83          | 27.31     |
| .8             | 1080.00          | 20.09     | .8             | 2028.15          | 27.50     |
| .9             | 1100.09          | 20.28     | .9             | 2055.65          | 27.69     |
| 11.0           | 1120.37          | 20.46     | 15.0           | 2083.33          | 27.87     |
| .1             | 1140.83          | 20.65     | .1             | 2111.20          | 28.06     |
| .2             | 1161.48          | 20.83     | .2             | 2139.26          | 28.24     |
| .3             | 1182.31          | 21.02     | .3             | 2167.50          | 28.43     |
| .4             | 1203.33          | 21.20     | .4             | 2195.93          | 28.61     |
| .5             | 1224.54          | 21.39     | .5             | 2224.54          | 28.80     |
| .6             | 1245.93          | 21.57     | .6             | 2253.33          | 28.98     |
| .7             | 1267.50          | 21.76     | .7             | 2282.31          | 29.17     |
| .8             | 1289.26          | 21.94     | .8             | 2311.48          | 29.35     |
| .9             | 1311.20          | 22.13     | .9             | 2340.83          | 29.54     |

*Table 4.—Contents of Slopes, for a slope of  $2\frac{1}{4}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 16.0           | 2370.37          | 29.72     | 20.0           | 3703.70          | 37.13     |
| .1             | 2400.09          | 29.91     | .1             | 3740.83          | 37.31     |
| .2             | 2430.00          | 30.09     | .2             | 3778.15          | 37.50     |
| .3             | 2460.09          | 30.28     | .3             | 3815.65          | 37.69     |
| .4             | 2490.37          | 30.46     | .4             | 3853.33          | 37.87     |
| .5             | 2520.83          | 30.65     | .5             | 3891.20          | 38.06     |
| .6             | 2551.48          | 30.83     | .6             | 3929.26          | 38.24     |
| .7             | 2582.31          | 31.02     | .7             | 3967.50          | 38.43     |
| .8             | 2613.33          | 31.20     | .8             | 4005.93          | 38.61     |
| .9             | 2644.54          | 31.39     | .9             | 4044.54          | 38.80     |
| 17.0           | 2675.93          | 31.57     | 21.0           | 4083.33          | 38.98     |
| .1             | 2707.50          | 31.76     | .1             | 4122.31          | 39.17     |
| .2             | 2739.26          | 31.94     | .2             | 4161.48          | 39.35     |
| .3             | 2771.20          | 32.13     | .3             | 4200.83          | 39.54     |
| .4             | 2803.33          | 32.31     | .4             | 4240.37          | 39.72     |
| .5             | 2835.65          | 32.50     | .5             | 4280.09          | 39.91     |
| .6             | 2868.15          | 32.69     | .6             | 4320.00          | 40.09     |
| .7             | 2900.83          | 32.87     | .7             | 4360.09          | 40.28     |
| .8             | 2933.70          | 33.06     | .8             | 4400.37          | 40.46     |
| .9             | 2966.76          | 33.24     | .9             | 4440.83          | 40.65     |
| 18.0           | 3000.00          | 33.43     | 22.0           | 4481.48          | 40.83     |
| .1             | 3033.43          | 33.61     | .1             | 4522.31          | 41.02     |
| .2             | 3067.04          | 33.80     | .2             | 4563.33          | 41.20     |
| .3             | 3100.83          | 33.98     | .3             | 4604.54          | 41.39     |
| .4             | 3134.81          | 34.17     | .4             | 4645.93          | 41.57     |
| .5             | 3168.98          | 34.35     | .5             | 4687.50          | 41.76     |
| .6             | 3203.33          | 34.54     | .6             | 4729.26          | 41.94     |
| .7             | 3237.87          | 34.72     | .7             | 4771.20          | 42.13     |
| .8             | 3272.59          | 34.91     | .8             | 4813.33          | 42.31     |
| .9             | 3307.50          | 35.09     | .9             | 4855.65          | 42.50     |
| 19.0           | 3342.59          | 35.28     | 23.0           | 4898.15          | 42.69     |
| .1             | 3377.87          | 35.46     | .1             | 4940.83          | 42.87     |
| .2             | 3413.33          | 35.65     | .2             | 4983.70          | 43.06     |
| .3             | 3448.98          | 35.83     | .3             | 5026.76          | 43.24     |
| .4             | 3484.81          | 36.02     | .4             | 5070.00          | 43.43     |
| .5             | 3520.83          | 36.20     | .5             | 5113.43          | 43.61     |
| .6             | 3557.04          | 36.39     | .6             | 5157.04          | 43.80     |
| .7             | 3593.43          | 36.57     | .7             | 5200.83          | 43.98     |
| .8             | 3630.00          | 36.76     | .8             | 5244.81          | 44.17     |
| .9             | 3666.76          | 36.94     | .9             | 5288.98          | 44.35     |



Table 4.—*Contents of Slopes, for a slope of  $2\frac{1}{2}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 24.0           | 5333.33          | 44.54     | 28.0           | 7259.26          | 51.94     |
| .1             | 5377.87          | 44.72     | .1             | 7311.20          | 52.13     |
| .2             | 5422.59          | 44.91     | .2             | 7363.33          | 52.31     |
| .3             | 5467.50          | 45.09     | .3             | 7415.65          | 52.50     |
| .4             | 5512.59          | 45.28     | .4             | 7468.15          | 52.69     |
| .5             | 5557.87          | 45.46     | .5             | 7520.83          | 52.87     |
| .6             | 5603.33          | 45.65     | .6             | 7573.70          | 53.06     |
| .7             | 5648.98          | 45.83     | .7             | 7626.76          | 53.24     |
| .8             | 5694.81          | 46.02     | .8             | 7680.00          | 53.43     |
| .9             | 5740.83          | 46.20     | .9             | 7733.43          | 53.61     |
| 25.0           | 5787.04          | 46.39     | 29.0           | 7787.04          | 53.80     |
| .1             | 5833.43          | 46.57     | .1             | 7840.83          | 53.98     |
| .2             | 5880.00          | 46.76     | .2             | 7894.81          | 54.17     |
| .3             | 5926.76          | 46.94     | .3             | 7948.98          | 54.35     |
| .4             | 5973.70          | 47.13     | .4             | 8003.33          | 54.54     |
| .5             | 6020.83          | 47.31     | .5             | 8057.87          | 54.72     |
| .6             | 6068.15          | 47.50     | .6             | 8112.59          | 54.91     |
| .7             | 6115.65          | 47.69     | .7             | 8167.50          | 55.09     |
| .8             | 6163.33          | 47.87     | .8             | 8222.59          | 55.28     |
| .9             | 6211.20          | 48.06     | .9             | 8277.87          | 55.46     |
| 26.0           | 6259.26          | 48.24     | 30.0           | 8333.33          | 55.65     |
| .1             | 6307.50          | 48.43     | .1             | 8388.98          | 55.83     |
| .2             | 6355.93          | 48.61     | .2             | 8444.81          | 56.02     |
| .3             | 6404.54          | 48.80     | .3             | 8500.83          | 56.20     |
| .4             | 6453.33          | 48.98     | .4             | 8557.04          | 56.39     |
| .5             | 6502.31          | 49.17     | .5             | 8613.43          | 56.57     |
| .6             | 6551.48          | 49.35     | .6             | 8670.00          | 56.76     |
| .7             | 6600.83          | 49.54     | .7             | 8726.76          | 56.94     |
| .8             | 6650.37          | 49.72     | .8             | 8783.70          | 57.13     |
| .9             | 6700.09          | 49.91     | .9             | 8840.83          | 57.31     |
| 27.0           | 6750.00          | 50.09     | 31.0           | 8898.15          | 57.50     |
| .1             | 6800.09          | 50.28     | .1             | 8955.65          | 57.69     |
| .2             | 6850.37          | 50.46     | .2             | 9013.33          | 57.87     |
| .3             | 6900.83          | 50.65     | .3             | 9071.20          | 58.06     |
| .4             | 6951.48          | 50.83     | .4             | 9129.26          | 58.24     |
| .5             | 7002.31          | 51.02     | .5             | 9187.50          | 58.43     |
| .6             | 7053.33          | 51.20     | .6             | 9245.93          | 58.61     |
| .7             | 7104.54          | 51.39     | .7             | 9304.54          | 58.80     |
| .8             | 7155.93          | 51.57     | .8             | 9363.33          | 58.98     |
| .9             | 7207.50          | 51.76     | .9             | 9422.31          | 59.17     |

*Table 4.—Contents of Slopes, for a slope of 2½ to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 32.0           | 9481.48          | 59.35     | 36.0           | 12000.00         | 66.76     |
| .1             | 9540.83          | 59.54     | .1             | 12066.76         | 66.94     |
| .2             | 9600.37          | 59.72     | .2             | 12133.70         | 67.13     |
| .3             | 9660.09          | 59.91     | .3             | 12200.83         | 67.31     |
| .4             | 9719.99          | 60.09     | .4             | 12268.15         | 67.50     |
| .5             | 9780.09          | 60.28     | .5             | 12335.65         | 67.69     |
| .6             | 9840.37          | 60.46     | .6             | 12403.33         | 67.87     |
| .7             | 9900.83          | 60.65     | .7             | 12471.20         | 68.06     |
| .8             | 9961.48          | 60.83     | .8             | 12539.26         | 68.24     |
| .9             | 10022.31         | 61.02     | .9             | 12607.50         | 68.43     |
| 33.0           | 10083.33         | 61.20     | 37.0           | 12675.93         | 68.61     |
| .1             | 10144.54         | 61.39     | .1             | 12744.54         | 68.80     |
| .2             | 10205.93         | 61.57     | .2             | 12813.33         | 68.98     |
| .3             | 10267.50         | 61.76     | .3             | 12882.31         | 69.17     |
| .4             | 10329.26         | 61.94     | .4             | 12951.48         | 69.35     |
| .5             | 10391.20         | 62.13     | .5             | 13020.83         | 69.54     |
| .6             | 10453.33         | 62.31     | .6             | 13090.37         | 69.72     |
| .7             | 10515.65         | 62.50     | .7             | 13160.09         | 69.91     |
| .8             | 10578.15         | 62.69     | .8             | 13229.99         | 70.09     |
| .9             | 10640.83         | 62.87     | .9             | 13300.09         | 70.28     |
| 34.0           | 10703.70         | 63.06     | 38.0           | 13370.37         | 70.46     |
| .1             | 10766.76         | 63.24     | .1             | 13440.83         | 70.65     |
| .2             | 10830.00         | 63.43     | .2             | 13511.48         | 70.83     |
| .3             | 10893.43         | 63.61     | .3             | 13582.31         | 71.02     |
| .4             | 10957.04         | 63.80     | .4             | 13653.33         | 71.20     |
| .5             | 11020.83         | 63.98     | .5             | 13724.54         | 71.39     |
| .6             | 11084.81         | 64.17     | .6             | 13795.93         | 71.57     |
| .7             | 11148.98         | 64.35     | .7             | 13867.50         | 71.76     |
| .8             | 11213.33         | 64.54     | .8             | 13939.26         | 71.94     |
| .9             | 11277.87         | 64.72     | .9             | 14011.20         | 72.13     |
| 35.0           | 11342.59         | 64.91     | 39.0           | 14083.33         | 72.31     |
| .1             | 11407.50         | 65.09     | .1             | 14155.65         | 72.50     |
| .2             | 11472.59         | 65.28     | .2             | 14228.15         | 72.69     |
| .3             | 11537.87         | 65.46     | .3             | 14300.83         | 72.87     |
| .4             | 11603.33         | 65.65     | .4             | 14373.70         | 73.06     |
| .5             | 11668.98         | 65.83     | .5             | 14446.76         | 73.24     |
| .6             | 11734.81         | 66.02     | .6             | 14520.00         | 73.43     |
| .7             | 11800.83         | 66.20     | .7             | 14593.43         | 73.61     |
| .8             | 11867.04         | 66.39     | .8             | 14667.04         | 73.80     |
| .9             | 11933.43         | 66.57     | .9             | 14740.83         | 73.98     |

*Table 4.—Contents of Slopes, for a slope of  $2\frac{1}{2}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 40.0           | 14814.81         | 74.17     | 44.0           | 17925.93         | 81.57     |
| .1             | 14888.98         | 74.35     | .1             | 18007.50         | 81.76     |
| .2             | 14963.33         | 74.54     | .2             | 18089.26         | 81.94     |
| .3             | 15037.87         | 74.72     | .3             | 18171.20         | 82.13     |
| .4             | 15112.59         | 74.91     | .4             | 18253.33         | 82.31     |
| .5             | 15187.50         | 75.09     | .5             | 18335.65         | 82.50     |
| .6             | 15262.59         | 75.28     | .6             | 18418.15         | 82.69     |
| .7             | 15337.87         | 75.46     | .7             | 18500.83         | 82.87     |
| .8             | 15413.33         | 75.65     | .8             | 18583.70         | 83.06     |
| .9             | 15488.98         | 75.83     | .9             | 18666.76         | 83.24     |
| 41.0           | 15564.81         | 76.02     | 45.0           | 18750.00         | 83.43     |
| .1             | 15646.83         | 76.20     | .1             | 18833.43         | 83.61     |
| .2             | 15717.04         | 76.39     | .2             | 18917.04         | 83.80     |
| .3             | 15793.43         | 76.57     | .3             | 19000.83         | 83.98     |
| .4             | 15870.00         | 76.76     | .4             | 19084.81         | 84.17     |
| .5             | 15946.76         | 76.94     | .5             | 19168.98         | 84.35     |
| .6             | 16023.70         | 77.13     | .6             | 19253.33         | 84.54     |
| .7             | 16100.83         | 77.31     | .7             | 19337.87         | 84.72     |
| .8             | 16178.15         | 77.50     | .8             | 19422.59         | 84.91     |
| .9             | 16255.65         | 77.69     | .9             | 19507.50         | 85.09     |
| 42.0           | 16333.33         | 77.87     | 46.0           | 19592.59         | 85.28     |
| .1             | 16411.20         | 78.06     | .1             | 19677.87         | 85.46     |
| .2             | 16489.26         | 78.24     | .2             | 19763.33         | 85.65     |
| .3             | 16567.50         | 78.43     | .3             | 19848.98         | 85.83     |
| .4             | 16645.93         | 78.61     | .4             | 19934.81         | 86.02     |
| .5             | 16724.54         | 78.80     | .5             | 20020.83         | 86.20     |
| .6             | 16803.33         | 78.98     | .6             | 20107.04         | 86.39     |
| .7             | 16882.31         | 79.17     | .7             | 20193.43         | 86.57     |
| .8             | 16961.48         | 79.35     | .8             | 20280.00         | 86.76     |
| .9             | 17040.83         | 79.54     | .9             | 20366.76         | 86.94     |
| 43.0           | 17120.37         | 79.72     | 47.0           | 20453.70         | 87.13     |
| .1             | 17200.09         | 79.91     | .1             | 20540.83         | 87.31     |
| .2             | 17279.99         | 80.09     | .2             | 20628.15         | 87.50     |
| .3             | 17360.09         | 80.28     | .3             | 20715.65         | 87.69     |
| .4             | 17440.37         | 80.46     | .4             | 20803.33         | 87.87     |
| .5             | 17520.83         | 80.65     | .5             | 20891.20         | 88.06     |
| .6             | 17601.48         | 80.83     | .6             | 20979.26         | 88.24     |
| .7             | 17682.31         | 81.02     | .7             | 21067.50         | 88.43     |
| .8             | 17763.33         | 81.20     | .8             | 21155.93         | 88.61     |
| .9             | 17844.54         | 81.39     | .9             | 21244.54         | 88.80     |

Table 4.—*Contents of Slopes, for a slope of  $2\frac{1}{2}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 48.0           | 21333.33         | 88.98     | 52.0           | 25037.04         | 96.39     |
| .1             | 21422.31         | 89.17     | .1             | 25133.43         | 96.57     |
| .2             | 21511.48         | 89.35     | .2             | 25230.00         | 96.76     |
| .3             | 21600.83         | 89.54     | .3             | 25326.76         | 96.94     |
| .4             | 21690.37         | 89.72     | .4             | 25423.70         | 97.13     |
| .5             | 21780.09         | 89.91     | .5             | 25520.83         | 97.31     |
| .6             | 21869.99         | 90.09     | .6             | 25618.15         | 97.50     |
| .7             | 21960.09         | 90.28     | .7             | 25715.65         | 97.69     |
| .8             | 22050.37         | 90.46     | .8             | 25813.33         | 97.87     |
| .9             | 22140.83         | 90.65     | .9             | 25911.20         | 98.06     |
| 49.0           | 22231.48         | 90.83     | 53.0           | 26009.26         | 98.24     |
| .1             | 22322.31         | 91.02     | .1             | 26107.50         | 98.43     |
| .2             | 22413.33         | 91.20     | .2             | 26205.93         | 98.61     |
| .3             | 22504.54         | 91.39     | .3             | 26304.54         | 98.80     |
| .4             | 22595.93         | 91.57     | .4             | 26403.33         | 98.98     |
| .5             | 22687.50         | 91.76     | .5             | 26502.31         | 99.17     |
| .6             | 22779.26         | 91.94     | .6             | 26601.48         | 99.35     |
| .7             | 22871.20         | 92.13     | .7             | 26700.83         | 99.54     |
| .8             | 22963.33         | 92.31     | .8             | 26800.37         | 99.72     |
| .9             | 23055.65         | 92.50     | .9             | 26900.09         | 99.91     |
| 50.0           | 23148.15         | 92.69     | 54.0           | 27000.00         | 100.09    |
| .1             | 23240.83         | 92.87     | .1             | 27100.09         | 100.28    |
| .2             | 23333.70         | 93.06     | .2             | 27200.37         | 100.46    |
| .3             | 23426.76         | 93.24     | .3             | 27300.83         | 100.65    |
| .4             | 23520.00         | 93.43     | .4             | 27401.48         | 100.83    |
| .5             | 23613.43         | 93.61     | .5             | 27502.31         | 101.02    |
| .6             | 23707.04         | 93.80     | .6             | 27603.33         | 101.20    |
| .7             | 23800.83         | 93.98     | .7             | 27704.54         | 101.39    |
| .8             | 23894.81         | 94.17     | .8             | 27805.93         | 101.57    |
| .9             | 23988.98         | 94.35     | .9             | 27907.50         | 101.76    |
| 51.0           | 24083.33         | 94.54     | 55.0           | 28009.26         | 101.94    |
| .1             | 24177.87         | 94.72     | .1             | 28111.20         | 102.13    |
| .2             | 24272.59         | 94.91     | .2             | 28213.33         | 102.31    |
| .3             | 24367.50         | 95.09     | .3             | 28315.65         | 102.50    |
| .4             | 24462.59         | 95.28     | .4             | 28418.15         | 102.69    |
| .5             | 24557.87         | 95.46     | .5             | 28520.83         | 102.87    |
| .6             | 24653.33         | 95.65     | .6             | 28623.70         | 103.06    |
| .7             | 24748.98         | 95.83     | .7             | 28726.76         | 103.24    |
| .8             | 24844.81         | 96.02     | .8             | 28830.00         | 103.43    |
| .9             | 24940.83         | 96.20     | .9             | 28933.43         | 103.61    |

*Table 4.—Contents of Slopes, for a slope of  $2\frac{1}{2}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 56.0           | 29037.04         | 103.80    | 60.0           | 33333.33         | 111.20    |
| .1             | 29140.83         | 103.98    | .1             | 33444.54         | 111.39    |
| .2             | 29244.81         | 104.17    | .2             | 33555.93         | 111.57    |
| .3             | 29348.98         | 104.35    | .3             | 33667.50         | 111.76    |
| .4             | 29453.33         | 104.54    | .4             | 33779.26         | 111.94    |
| .5             | 29557.87         | 104.72    | .5             | 33891.20         | 112.13    |
| .6             | 29662.59         | 104.91    | .6             | 34003.33         | 112.31    |
| .7             | 29767.50         | 105.09    | .7             | 34115.65         | 112.50    |
| .8             | 29872.59         | 105.28    | .8             | 34228.15         | 112.69    |
| .9             | 29977.87         | 105.46    | .9             | 34340.83         | 112.87    |
| 57.0           | 30083.33         | 105.65    | 61.0           | 34453.70         | 113.06    |
| .1             | 30188.98         | 105.83    | .1             | 34566.76         | 113.24    |
| .2             | 30294.81         | 106.02    | .2             | 34680.00         | 113.43    |
| .3             | 30400.83         | 106.20    | .3             | 34793.43         | 113.61    |
| .4             | 30507.04         | 106.39    | .4             | 34907.04         | 113.80    |
| .5             | 30613.43         | 106.57    | .5             | 35020.83         | 113.98    |
| .6             | 30720.00         | 106.76    | .6             | 35134.81         | 114.17    |
| .7             | 30826.76         | 106.94    | .7             | 35248.98         | 114.35    |
| .8             | 30933.70         | 107.13    | .8             | 35363.33         | 114.54    |
| .9             | 31040.83         | 107.31    | .9             | 35477.87         | 114.72    |
| 58.0           | 31148.15         | 107.50    | 62.0           | 35592.59         | 114.91    |
| .1             | 31255.65         | 107.69    | .1             | 35707.50         | 115.09    |
| .2             | 31363.33         | 107.87    | .2             | 35822.59         | 115.28    |
| .3             | 31471.20         | 108.06    | .3             | 35937.87         | 115.46    |
| .4             | 31579.26         | 108.24    | .4             | 36053.33         | 115.65    |
| .5             | 31687.50         | 108.43    | .5             | 36168.98         | 115.83    |
| .6             | 31795.93         | 108.61    | .6             | 36284.81         | 116.02    |
| .7             | 31904.54         | 108.80    | .7             | 36400.83         | 116.20    |
| .8             | 32013.33         | 108.98    | .8             | 36517.04         | 116.39    |
| .9             | 32122.31         | 109.17    | .9             | 36633.43         | 116.57    |
| 59.0           | 32231.48         | 109.35    | 63.0           | 36750.00         | 116.76    |
| .1             | 32340.83         | 109.54    | .1             | 36866.76         | 116.94    |
| .2             | 32450.37         | 109.72    | .2             | 36983.70         | 117.13    |
| .3             | 32560.09         | 109.91    | .3             | 37100.83         | 117.31    |
| .4             | 32670.00         | 110.09    | .4             | 37218.15         | 117.50    |
| .5             | 32780.09         | 110.28    | .5             | 37335.65         | 117.69    |
| .6             | 32890.37         | 110.46    | .6             | 37453.33         | 117.87    |
| .7             | 33000.83         | 110.65    | .7             | 37571.20         | 118.06    |
| .8             | 33111.48         | 110.83    | .8             | 37689.26         | 118.24    |
| .9             | 33222.31         | 111.02    | .9             | 37807.50         | 118.43    |

Table 4.—*Contents of Slopes, for a slope of  $2\frac{1}{2}$  to 1, and for a length of 100 feet.*

| <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>D.</i> |
|----------------|------------------|-----------|----------------|------------------|-----------|
| 64.0           | 37925.92         | 118.61    | 68.0           | 42814.81         | 126.02    |
| .1             | 38044.54         | 118.80    | .1             | 42940.83         | 126.20    |
| .2             | 38163.33         | 118.98    | .2             | 43067.04         | 126.39    |
| .3             | 38282.31         | 119.17    | .3             | 43193.43         | 126.57    |
| .4             | 38401.48         | 119.35    | .4             | 43320.00         | 126.76    |
| .5             | 38520.83         | 119.54    | .5             | 43446.76         | 126.94    |
| .6             | 38640.37         | 119.72    | .6             | 43573.70         | 127.13    |
| .7             | 38760.09         | 119.91    | .7             | 43700.83         | 127.31    |
| .8             | 38880.00         | 120.09    | .8             | 43828.15         | 127.50    |
| .9             | 39000.09         | 120.28    | .9             | 43955.65         | 127.69    |
| 65.0           | 39120.37         | 120.46    | 69.0           | 44083.33         | 127.87    |
| .1             | 39240.83         | 120.65    | .1             | 44211.20         | 128.06    |
| .2             | 39361.48         | 120.83    | .2             | 44339.26         | 128.24    |
| .3             | 39482.31         | 121.02    | .3             | 44467.50         | 128.43    |
| .4             | 39603.33         | 121.20    | .4             | 44595.93         | 128.61    |
| .5             | 39724.54         | 121.39    | .5             | 44724.54         | 128.80    |
| .6             | 39845.93         | 121.57    | .6             | 44853.33         | 128.98    |
| .7             | 39967.50         | 121.76    | .7             | 44982.31         | 129.17    |
| .8             | 40089.26         | 121.94    | .8             | 45111.48         | 129.35    |
| .9             | 40211.20         | 122.13    | .9             | 45240.83         | 129.54    |
| 66.0           | 40333.33         | 122.31    | 70.0           | 45370.37         | 129.72    |
| .1             | 40455.65         | 122.50    | .1             | 45500.09         | 129.91    |
| .2             | 40578.15         | 122.68    | .2             | 45630.00         | 130.09    |
| .3             | 40700.83         | 122.87    | .3             | 45760.09         | 130.28    |
| .4             | 40823.70         | 123.06    | .4             | 45890.37         | 130.46    |
| .5             | 40946.76         | 123.24    | .5             | 46020.83         | 130.65    |
| .6             | 41070.00         | 123.43    | .6             | 46151.48         | 130.83    |
| .7             | 41193.43         | 123.61    | .7             | 46282.31         | 131.02    |
| .8             | 41317.04         | 123.80    | .8             | 46413.33         | 131.20    |
| .9             | 41440.83         | 123.98    | .9             | 46544.54         | 131.39    |
| 67.0           | 41564.81         | 124.17    | 71.0           | 46675.93         | 131.57    |
| .1             | 41688.98         | 124.35    | .1             | 46807.50         | 131.76    |
| .2             | 41813.33         | 124.54    | .2             | 46939.26         | 131.94    |
| .3             | 41937.87         | 124.72    | .3             | 47071.20         | 132.13    |
| .4             | 42062.59         | 124.91    | .4             | 47203.33         | 132.31    |
| .5             | 42187.50         | 125.09    | .5             | 47335.65         | 132.50    |
| .6             | 42312.59         | 125.28    | .6             | 47468.15         | 132.69    |
| .7             | 42437.87         | 125.46    | .7             | 47600.83         | 132.87    |
| .8             | 42563.33         | 125.65    | .8             | 47733.70         | 133.06    |
| .9             | 42688.98         | 125.83    | .9             | 47866.76         | 133.24    |

Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.

| <i>Length.</i> | <i>Depth.</i> |     |     |      |      | <i>Length.</i> |
|----------------|---------------|-----|-----|------|------|----------------|
|                | 0.1           | 0.2 | 0.3 | 0.4  | 0.5  |                |
| 10             | .01           | .04 | .08 | .15  | .23  | 10             |
| 20             | .02           | .08 | .16 | .30  | .46  | 20             |
| 30             | .03           | .12 | .24 | .45  | .69  | 30             |
| 40             | .04           | .16 | .32 | .60  | .92  | 40             |
| 50             | .05           | .20 | .40 | .75  | 1.15 | 50             |
| 60             | .06           | .24 | .48 | .90  | 1.38 | 60             |
| 70             | .07           | .28 | .56 | 1.05 | 1.61 | 70             |
| 80             | .08           | .32 | .64 | 1.20 | 1.84 | 80             |
| 90             | .09           | .36 | .72 | 1.35 | 2.07 | 90             |
| 100            | .10           | .40 | .80 | 1.50 | 2.30 | 100            |

| <i>Length.</i> | 0.6  | 0.7  | 0.8  | 0.9  | 1.0  | <i>Length</i> |
|----------------|------|------|------|------|------|---------------|
| 10             | .33  | .45  | .59  | .75  | .93  | 10            |
| 20             | .66  | .90  | 1.18 | 1.50 | 1.86 | 20            |
| 30             | .99  | 1.35 | 1.77 | 2.25 | 2.79 | 30            |
| 40             | 1.32 | 1.80 | 2.36 | 3.00 | 3.72 | 40            |
| 50             | 1.65 | 2.25 | 2.95 | 3.75 | 4.65 | 50            |
| 60             | 1.98 | 2.70 | 3.54 | 4.50 | 5.58 | 60            |
| 70             | 2.31 | 3.15 | 4.13 | 5.25 | 6.51 | 70            |
| 80             | 2.64 | 3.60 | 4.72 | 6.00 | 7.44 | 80            |
| 90             | 2.97 | 4.05 | 5.31 | 6.75 | 8.37 | 90            |
| 100            | 3.30 | 4.50 | 5.90 | 7.50 | 9.30 | 100           |

| <i>Length.</i> | 1.1   | 1.2   | 1.3   | 1.4   | 1.5   | <i>Length</i> |
|----------------|-------|-------|-------|-------|-------|---------------|
| 10             | 1.12  | 1.33  | 1.56  | 1.81  | 2.08  | 10            |
| 20             | 2.24  | 2.66  | 3.12  | 3.62  | 4.16  | 20            |
| 30             | 3.36  | 3.99  | 4.68  | 5.43  | 6.24  | 30            |
| 40             | 4.48  | 5.32  | 6.24  | 7.24  | 8.32  | 40            |
| 50             | 5.60  | 6.65  | 7.80  | 9.05  | 10.40 | 50            |
| 60             | 6.72  | 7.98  | 9.36  | 10.86 | 12.48 | 60            |
| 70             | 7.84  | 9.31  | 10.92 | 12.67 | 14.56 | 70            |
| 80             | 8.96  | 10.64 | 12.48 | 14.48 | 16.64 | 80            |
| 90             | 10.08 | 11.97 | 14.04 | 16.29 | 18.72 | 90            |
| 100            | 11.20 | 13.30 | 15.60 | 18.10 | 20.80 | 100           |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|-------|----------------|
|                | 1.6           | 1.7   | 1.8   | 1.9   | 2.0   |                |
| 10             | 2.37          | 2.68  | 3.00  | 3.34  | 3.70  | 10             |
| 20             | 4.74          | 5.36  | 6.00  | 6.68  | 7.40  | 20             |
| 30             | 7.11          | 8.04  | 9.00  | 10.02 | 11.10 | 30             |
| 40             | 9.48          | 10.72 | 12.00 | 13.36 | 14.80 | 40             |
| 50             | 11.85         | 13.40 | 15.00 | 16.70 | 18.50 | 50             |
| 60             | 14.22         | 16.08 | 18.00 | 20.04 | 22.20 | 60             |
| 70             | 16.59         | 18.76 | 21.00 | 23.38 | 25.90 | 70             |
| 80             | 18.96         | 21.44 | 24.00 | 26.72 | 29.60 | 80             |
| 90             | 21.33         | 24.12 | 27.00 | 30.06 | 33.30 | 90             |
| 100            | 23.70         | 26.80 | 30.00 | 33.40 | 37.00 | 100            |

| <i>L.</i> | 2.1   | 2.2   | 2.3   | 2.4   | 2.5   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-------|-----------|
| 10        | 4.08  | 4.48  | 4.90  | 5.33  | 5.79  | 10        |
| 20        | 8.16  | 8.96  | 9.80  | 10.66 | 11.58 | 20        |
| 30        | 12.24 | 13.44 | 14.70 | 15.99 | 17.37 | 30        |
| 40        | 16.32 | 17.92 | 19.60 | 21.32 | 23.16 | 40        |
| 50        | 20.40 | 22.40 | 24.50 | 26.65 | 28.95 | 50        |
| 60        | 24.48 | 26.88 | 29.40 | 31.98 | 34.74 | 60        |
| 70        | 28.56 | 31.36 | 34.30 | 37.31 | 40.53 | 70        |
| 80        | 32.64 | 35.84 | 39.20 | 42.64 | 46.32 | 80        |
| 90        | 36.72 | 40.32 | 44.10 | 47.97 | 52.11 | 90        |
| 100       | 40.80 | 44.80 | 49.00 | 53.30 | 57.90 | 100       |

| <i>L.</i> | 2.6   | 2.7   | 2.8   | 2.9   | 3.0   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-------|-----------|
| 10        | 6.26  | 6.75  | 7.26  | 7.79  | 8.33  | 10        |
| 20        | 12.52 | 13.50 | 14.52 | 15.58 | 16.66 | 20        |
| 30        | 18.78 | 20.25 | 21.78 | 23.37 | 24.99 | 30        |
| 40        | 25.04 | 27.00 | 29.04 | 31.16 | 33.32 | 40        |
| 50        | 31.30 | 33.75 | 36.30 | 38.95 | 41.65 | 50        |
| 60        | 37.56 | 40.50 | 43.56 | 46.74 | 49.98 | 60        |
| 70        | 43.82 | 47.25 | 50.82 | 54.53 | 58.31 | 70        |
| 80        | 50.08 | 54.00 | 58.08 | 62.32 | 66.64 | 80        |
| 90        | 56.34 | 60.75 | 65.34 | 70.11 | 74.97 | 90        |
| 100       | 62.60 | 67.50 | 72.60 | 77.90 | 83.30 | 100       |



*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |       |        |        |        | <i>Length.</i> |
|----------------|---------------|-------|--------|--------|--------|----------------|
|                | 3.1           | 3.2   | 3.3    | 3.4    | 3.5    |                |
| 10             | 8.90          | 9.48  | 10.08  | 10.70  | 11.34  | 10             |
| 20             | 17.80         | 18.96 | 20.16  | 21.40  | 22.68  | 20             |
| 30             | 26.70         | 28.44 | 30.24  | 32.10  | 34.02  | 30             |
| 40             | 35.60         | 37.92 | 40.32  | 42.80  | 45.36  | 40             |
| 50             | 44.50         | 47.40 | 50.40  | 53.50  | 56.70  | 50             |
| 60             | 53.40         | 56.88 | 60.48  | 64.20  | 68.04  | 60             |
| 70             | 62.30         | 66.36 | 70.56  | 74.90  | 79.38  | 70             |
| 80             | 71.20         | 75.84 | 80.64  | 85.60  | 90.72  | 80             |
| 90             | 80.10         | 85.32 | 90.72  | 96.30  | 102.06 | 90             |
| 100            | 89.00         | 94.80 | 100.80 | 107.00 | 113.40 | 100            |

| <i>L.</i> | 3.6    | 3.7    | 3.8    | 3.9    | 4.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 12.00  | 12.68  | 13.37  | 14.08  | 14.81  | 10        |
| 20        | 24.00  | 25.36  | 26.74  | 28.16  | 29.62  | 20        |
| 30        | 36.00  | 38.04  | 40.11  | 42.24  | 44.43  | 30        |
| 40        | 48.00  | 50.72  | 53.48  | 56.32  | 59.24  | 40        |
| 50        | 60.00  | 63.40  | 66.85  | 70.40  | 74.05  | 50        |
| 60        | 72.00  | 76.08  | 80.22  | 84.48  | 88.86  | 60        |
| 70        | 84.00  | 88.76  | 93.50  | 98.56  | 103.67 | 70        |
| 80        | 96.00  | 101.44 | 106.96 | 112.64 | 118.48 | 80        |
| 90        | 108.00 | 114.12 | 120.33 | 126.72 | 133.29 | 90        |
| 100       | 120.00 | 126.80 | 133.70 | 140.80 | 148.10 | 100       |

| <i>L.</i> | 4.1    | 4.2    | 4.3    | 4.4    | 4.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 15.56  | 16.33  | 17.12  | 17.93  | 18.75  | 10        |
| 20        | 31.12  | 32.66  | 34.24  | 35.86  | 37.50  | 20        |
| 30        | 46.68  | 48.99  | 51.36  | 53.79  | 56.25  | 30        |
| 40        | 62.24  | 65.32  | 68.48  | 71.72  | 75.00  | 40        |
| 50        | 77.80  | 81.65  | 85.60  | 89.65  | 93.75  | 50        |
| 60        | 93.36  | 97.98  | 102.72 | 107.58 | 112.50 | 60        |
| 70        | 108.92 | 114.31 | 119.84 | 125.51 | 131.25 | 70        |
| 80        | 124.48 | 130.64 | 136.96 | 143.44 | 150.00 | 80        |
| 90        | 140.04 | 146.97 | 154.08 | 161.37 | 168.75 | 90        |
| 100       | 155.60 | 163.30 | 171.20 | 179.30 | 187.50 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 4.6           | 4.7    | 4.8    | 4.9    | 5.0    |                |
| 10             | 19.59         | 20.45  | 21.33  | 22.23  | 23.15  | 10             |
| 20             | 39.18         | 40.90  | 42.66  | 44.46  | 46.30  | 20             |
| 30             | 58.77         | 61.35  | 63.99  | 66.69  | 69.45  | 30             |
| 40             | 78.36         | 81.80  | 85.32  | 88.92  | 92.60  | 40             |
| 50             | 97.95         | 102.25 | 106.65 | 111.15 | 115.75 | 50             |
| 60             | 117.54        | 122.70 | 127.98 | 133.38 | 138.90 | 60             |
| 70             | 137.13        | 143.15 | 149.31 | 155.61 | 162.05 | 70             |
| 80             | 156.72        | 163.60 | 170.64 | 177.84 | 185.20 | 80             |
| 90             | 176.31        | 184.05 | 191.97 | 200.07 | 208.35 | 90             |
| 100            | 195.90        | 204.50 | 213.30 | 222.30 | 231.50 | 100            |

| <i>L.</i> | 5.1    | 5.2    | 5.3    | 5.4    | 5.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 24.08  | 25.04  | 26.01  | 27.00  | 28.01  | 10        |
| 20        | 48.16  | 50.08  | 52.02  | 54.00  | 56.02  | 20        |
| 30        | 72.24  | 75.12  | 78.03  | 81.00  | 84.03  | 30        |
| 40        | 96.32  | 100.16 | 104.04 | 108.00 | 112.04 | 40        |
| 50        | 120.40 | 125.20 | 130.05 | 135.00 | 140.05 | 50        |
| 60        | 144.48 | 150.24 | 156.06 | 162.00 | 168.06 | 60        |
| 70        | 168.56 | 175.28 | 182.07 | 189.00 | 196.07 | 70        |
| 80        | 192.64 | 200.32 | 208.08 | 216.00 | 224.08 | 80        |
| 90        | 216.72 | 225.36 | 234.09 | 243.00 | 252.09 | 90        |
| 100       | 240.80 | 250.40 | 260.10 | 270.00 | 280.10 | 100       |

| <i>L.</i> | 5.6    | 5.7    | 5.8    | 5.9    | 6.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 29.04  | 30.08  | 31.15  | 32.23  | 33.33  | 10        |
| 20        | 58.08  | 60.16  | 62.30  | 64.46  | 66.66  | 20        |
| 30        | 87.12  | 90.24  | 93.45  | 96.69  | 99.99  | 30        |
| 40        | 116.16 | 120.32 | 124.60 | 128.92 | 133.32 | 40        |
| 50        | 145.20 | 150.40 | 155.75 | 161.15 | 166.65 | 50        |
| 60        | 174.24 | 180.48 | 186.90 | 193.38 | 199.98 | 60        |
| 70        | 203.28 | 210.56 | 218.05 | 225.61 | 233.31 | 70        |
| 80        | 232.32 | 240.64 | 249.20 | 257.84 | 266.64 | 80        |
| 90        | 261.36 | 270.72 | 280.35 | 290.07 | 299.97 | 90        |
| 100       | 290.40 | 300.80 | 311.50 | 322.30 | 333.30 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 6.1           | 6.2    | 6.3    | 6.4    | 6.5    |                |
| 10             | 34.45         | 35.59  | 36.75  | 37.93  | 39.12  | 10             |
| 20             | 68.90         | 71.18  | 73.50  | 75.86  | 78.24  | 20             |
| 30             | 103.35        | 106.77 | 110.25 | 113.79 | 117.36 | 30             |
| 40             | 137.80        | 142.36 | 147.00 | 151.72 | 156.48 | 40             |
| 50             | 172.25        | 177.95 | 183.75 | 189.65 | 195.60 | 50             |
| 60             | 206.70        | 213.54 | 220.50 | 227.58 | 234.72 | 60             |
| 70             | 241.15        | 249.13 | 257.25 | 265.51 | 273.84 | 70             |
| 80             | 275.60        | 284.72 | 294.00 | 303.44 | 312.96 | 80             |
| 90             | 310.05        | 320.31 | 330.75 | 341.37 | 352.08 | 90             |
| 100            | 344.50        | 355.90 | 367.50 | 379.30 | 391.20 | 100            |

| <i>L.</i> | 6.6    | 6.7    | 6.8    | 6.9    | 7.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 40.33  | 41.56  | 42.81  | 44.08  | 45.37  | 10        |
| 20        | 80.66  | 83.12  | 85.62  | 88.16  | 90.74  | 20        |
| 30        | 120.99 | 124.68 | 128.43 | 132.24 | 136.11 | 30        |
| 40        | 161.32 | 166.24 | 171.24 | 176.32 | 181.48 | 40        |
| 50        | 201.65 | 207.80 | 214.05 | 220.40 | 226.85 | 50        |
| 60        | 241.98 | 249.36 | 256.86 | 264.48 | 272.22 | 60        |
| 70        | 282.31 | 290.92 | 299.67 | 308.56 | 317.59 | 70        |
| 80        | 322.64 | 332.48 | 342.48 | 352.64 | 362.96 | 80        |
| 90        | 362.97 | 374.04 | 385.29 | 396.72 | 408.33 | 90        |
| 100       | 403.30 | 415.60 | 428.10 | 440.80 | 453.70 | 100       |

| <i>L.</i> | 7.1    | 7.2    | 7.3    | 7.4    | 7.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 46.68  | 48.00  | 49.34  | 50.70  | 52.08  | 10        |
| 20        | 93.36  | 96.00  | 98.68  | 101.40 | 104.16 | 20        |
| 30        | 140.04 | 144.00 | 148.02 | 152.10 | 156.24 | 30        |
| 40        | 186.72 | 192.00 | 197.36 | 202.80 | 208.32 | 40        |
| 50        | 233.40 | 240.00 | 246.70 | 253.50 | 260.40 | 50        |
| 60        | 280.08 | 288.00 | 296.04 | 304.20 | 312.48 | 60        |
| 70        | 326.76 | 336.00 | 345.38 | 354.90 | 364.56 | 70        |
| 80        | 373.44 | 384.00 | 394.72 | 405.60 | 416.64 | 80        |
| 90        | 420.12 | 432.00 | 444.06 | 456.30 | 468.72 | 90        |
| 100       | 466.80 | 480.00 | 493.40 | 507.00 | 520.80 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 7.6           | 7.7    | 7.8    | 7.9    | 8.0    |                |
| 10             | 53.48         | 54.90  | 56.33  | 57.79  | 59.26  | 10             |
| 20             | 106.96        | 109.80 | 112.66 | 115.58 | 118.52 | 20             |
| 30             | 160.44        | 164.70 | 168.99 | 173.37 | 177.78 | 30             |
| 40             | 213.92        | 219.60 | 225.32 | 231.16 | 237.04 | 40             |
| 50             | 267.40        | 274.50 | 281.65 | 288.95 | 296.30 | 50             |
| 60             | 320.88        | 329.40 | 337.98 | 346.74 | 355.56 | 60             |
| 70             | 374.36        | 384.30 | 394.31 | 404.53 | 414.82 | 70             |
| 80             | 427.84        | 439.20 | 450.64 | 462.32 | 474.08 | 80             |
| 90             | 481.32        | 494.10 | 506.97 | 520.11 | 533.34 | 90             |
| 100            | 534.80        | 549.00 | 563.30 | 577.90 | 592.60 | 100            |

| <i>L.</i> | 8.1    | 8.2    | 8.3    | 8.4    | 8.5    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 60.75  | 62.26  | 63.79  | 65.33  | 66.90  | 10        |
| 20        | 121.50 | 124.52 | 127.58 | 130.66 | 133.80 | 20        |
| 30        | 182.25 | 186.78 | 191.37 | 195.99 | 200.70 | 30        |
| 40        | 243.00 | 249.04 | 255.16 | 261.32 | 267.60 | 40        |
| 50        | 303.75 | 311.30 | 318.95 | 326.65 | 334.50 | 50        |
| 60        | 364.50 | 373.56 | 382.74 | 391.98 | 401.40 | 60        |
| 70        | 425.25 | 435.82 | 446.53 | 457.31 | 468.30 | 70        |
| 80        | 486.00 | 498.08 | 510.32 | 522.64 | 535.20 | 80        |
| 90        | 546.75 | 560.34 | 574.11 | 587.97 | 602.10 | 90        |
| 100       | 607.50 | 622.60 | 637.90 | 653.30 | 669.00 | 100       |

| <i>L.</i> | 8.6    | 8.7    | 8.8    | 8.9    | 9.0    | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 68.48  | 70.08  | 71.70  | 73.34  | 75.00  | 10        |
| 20        | 136.96 | 140.16 | 143.40 | 146.68 | 150.00 | 20        |
| 30        | 205.44 | 210.24 | 215.10 | 220.02 | 225.00 | 30        |
| 40        | 273.92 | 280.32 | 286.80 | 293.36 | 300.00 | 40        |
| 50        | 342.40 | 350.40 | 358.50 | 366.70 | 375.00 | 50        |
| 60        | 410.88 | 420.48 | 430.20 | 440.04 | 450.00 | 60        |
| 70        | 479.36 | 490.56 | 501.90 | 513.38 | 525.00 | 70        |
| 80        | 547.84 | 560.64 | 573.60 | 586.72 | 600.00 | 80        |
| 90        | 616.32 | 630.72 | 645.30 | 660.06 | 675.00 | 90        |
| 100       | 684.80 | 700.80 | 717.00 | 733.40 | 750.00 | 100       |

Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.

| Length. | Depth. |        |        |        |        | Length. |
|---------|--------|--------|--------|--------|--------|---------|
|         | 9.1    | 9.2    | 9.3    | 9.4    | 9.5    |         |
| 10      | 76.68  | 78.37  | 80.08  | 81.81  | 83.56  | 10      |
| 20      | 153.36 | 156.74 | 160.16 | 163.62 | 167.12 | 20      |
| 30      | 230.04 | 235.11 | 240.24 | 245.43 | 250.68 | 30      |
| 40      | 306.72 | 313.48 | 320.32 | 327.24 | 334.24 | 40      |
| 50      | 383.40 | 391.85 | 400.40 | 409.05 | 417.80 | 50      |
| 60      | 460.08 | 470.22 | 480.48 | 490.86 | 501.36 | 60      |
| 70      | 536.76 | 548.59 | 560.56 | 572.67 | 584.92 | 70      |
| 80      | 613.44 | 626.96 | 640.64 | 654.48 | 668.48 | 80      |
| 90      | 690.12 | 705.33 | 720.72 | 736.29 | 752.04 | 90      |
| 100     | 766.80 | 783.70 | 800.80 | 818.10 | 835.60 | 100     |

| L.  | 9.6    | 9.7    | 9.8    | 9.9    | 10.0   | L.  |
|-----|--------|--------|--------|--------|--------|-----|
| 10  | 85.33  | 87.12  | 88.93  | 90.75  | 92.59  | 10  |
| 20  | 170.66 | 174.24 | 177.86 | 181.50 | 185.18 | 20  |
| 30  | 255.99 | 261.36 | 266.79 | 272.25 | 277.77 | 30  |
| 40  | 341.32 | 348.48 | 355.72 | 363.00 | 370.36 | 40  |
| 50  | 426.65 | 435.60 | 444.65 | 453.75 | 462.95 | 50  |
| 60  | 511.98 | 522.72 | 533.58 | 544.50 | 555.54 | 60  |
| 70  | 597.31 | 609.84 | 622.51 | 635.25 | 648.13 | 70  |
| 80  | 682.64 | 696.96 | 711.44 | 726.00 | 740.72 | 80  |
| 90  | 767.97 | 784.08 | 800.37 | 816.75 | 833.31 | 90  |
| 100 | 853.30 | 871.20 | 889.30 | 907.50 | 925.90 | 100 |

| L.  | 10.1   | 10.2   | 10.3   | 10.4    | 10.5    | L.  |
|-----|--------|--------|--------|---------|---------|-----|
| 10  | 94.45  | 96.33  | 98.23  | 100.15  | 102.08  | 10  |
| 20  | 188.90 | 192.66 | 196.46 | 200.30  | 204.16  | 20  |
| 30  | 283.35 | 288.99 | 294.69 | 300.45  | 306.24  | 30  |
| 40  | 377.80 | 385.32 | 392.92 | 400.60  | 408.32  | 40  |
| 50  | 472.25 | 481.65 | 491.15 | 500.75  | 510.40  | 50  |
| 60  | 566.70 | 577.98 | 589.38 | 600.90  | 612.48  | 60  |
| 70  | 661.15 | 674.31 | 687.61 | 701.05  | 714.56  | 70  |
| 80  | 755.60 | 770.64 | 785.84 | 801.20  | 816.64  | 80  |
| 90  | 850.05 | 866.97 | 884.07 | 901.35  | 918.72  | 90  |
| 100 | 944.50 | 963.30 | 982.30 | 1001.50 | 1020.80 | 100 |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 10.6          | 10.7    | 10.8    | 10.9    |                |
| 10             | 104.04        | 106.01  | 108.00  | 110.01  | 10             |
| 20             | 208.08        | 212.02  | 216.00  | 220.02  | 20             |
| 30             | 312.12        | 318.03  | 324.00  | 330.03  | 30             |
| 40             | 416.16        | 424.04  | 432.00  | 440.04  | 40             |
| 50             | 520.20        | 530.05  | 540.00  | 550.05  | 50             |
| 60             | 624.24        | 636.06  | 648.00  | 660.06  | 60             |
| 70             | 728.28        | 742.07  | 756.00  | 770.07  | 70             |
| 80             | 832.32        | 848.08  | 864.00  | 880.08  | 80             |
| 90             | 936.36        | 954.09  | 972.00  | 990.09  | 90             |
| 100            | 1040.40       | 1060.10 | 1080.00 | 1100.10 | 100            |

| <i>L.</i> | 11.0    | 11.1    | 11.2    | 11.3    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 112.04  | 114.08  | 116.15  | 118.23  | 10        |
| 20        | 224.08  | 228.16  | 232.30  | 236.46  | 20        |
| 30        | 336.12  | 342.24  | 348.45  | 354.69  | 30        |
| 40        | 448.16  | 456.32  | 464.60  | 472.92  | 40        |
| 50        | 560.20  | 570.40  | 580.75  | 591.15  | 50        |
| 60        | 672.24  | 684.48  | 696.90  | 709.38  | 60        |
| 70        | 784.28  | 798.56  | 813.05  | 827.61  | 70        |
| 80        | 896.32  | 912.64  | 929.20  | 945.84  | 80        |
| 90        | 1008.36 | 1026.72 | 1045.35 | 1064.07 | 90        |
| 100       | 1120.40 | 1140.80 | 1161.50 | 1182.30 | 100       |

| <i>L.</i> | 11.4    | 11.5    | 11.6    | 11.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 120.33  | 122.45  | 124.59  | 126.75  | 10        |
| 20        | 240.66  | 244.90  | 249.18  | 253.50  | 20        |
| 30        | 360.99  | 367.35  | 373.77  | 380.25  | 30        |
| 40        | 481.32  | 489.80  | 498.36  | 507.00  | 40        |
| 50        | 601.65  | 612.25  | 622.95  | 633.75  | 50        |
| 60        | 721.98  | 734.70  | 747.54  | 760.50  | 60        |
| 70        | 842.31  | 857.15  | 872.13  | 887.25  | 70        |
| 80        | 962.64  | 979.60  | 996.72  | 1014.00 | 80        |
| 90        | 1082.97 | 1102.05 | 1121.31 | 1140.75 | 90        |
| 100       | 1203.30 | 1224.50 | 1245.90 | 1267.50 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|--------|----------------|
|                | 9.1           | 9.2    | 9.3    | 9.4    | 9.5    |                |
| 10             | 76.68         | 78.37  | 80.08  | 81.81  | 83.56  | 10             |
| 20             | 153.36        | 156.74 | 160.16 | 163.62 | 167.12 | 20             |
| 30             | 230.04        | 235.11 | 240.24 | 245.43 | 250.68 | 30             |
| 40             | 306.72        | 313.48 | 320.32 | 327.24 | 334.24 | 40             |
| 50             | 383.40        | 391.85 | 400.40 | 409.05 | 417.80 | 50             |
| 60             | 460.08        | 470.22 | 480.48 | 490.86 | 501.36 | 60             |
| 70             | 536.76        | 548.59 | 560.56 | 572.67 | 584.92 | 70             |
| 80             | 613.44        | 626.96 | 640.64 | 654.48 | 668.48 | 80             |
| 90             | 690.12        | 705.33 | 720.72 | 736.29 | 752.04 | 90             |
| 100            | 766.80        | 783.70 | 800.80 | 818.10 | 835.60 | 100            |

| <i>L.</i> | 9.6    | 9.7    | 9.8    | 9.9    | 10.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|--------|-----------|
| 10        | 85.33  | 87.12  | 88.93  | 90.75  | 92.59  | 10        |
| 20        | 170.66 | 174.24 | 177.86 | 181.50 | 185.18 | 20        |
| 30        | 255.99 | 261.36 | 266.79 | 272.25 | 277.77 | 30        |
| 40        | 341.32 | 348.48 | 355.72 | 363.00 | 370.36 | 40        |
| 50        | 426.65 | 435.60 | 444.65 | 453.75 | 462.95 | 50        |
| 60        | 511.98 | 522.72 | 533.58 | 544.50 | 555.54 | 60        |
| 70        | 597.31 | 609.84 | 622.51 | 635.25 | 648.13 | 70        |
| 80        | 682.64 | 696.96 | 711.44 | 726.00 | 740.72 | 80        |
| 90        | 767.97 | 784.08 | 800.37 | 816.75 | 833.31 | 90        |
| 100       | 853.30 | 871.20 | 889.30 | 907.50 | 925.90 | 100       |

| <i>L.</i> | 10.1   | 10.2   | 10.3   | 10.4    | 10.5    | <i>L.</i> |
|-----------|--------|--------|--------|---------|---------|-----------|
| 10        | 94.45  | 96.33  | 98.23  | 100.15  | 102.08  | 10        |
| 20        | 188.90 | 192.66 | 196.46 | 200.30  | 204.16  | 20        |
| 30        | 283.35 | 288.99 | 294.69 | 300.45  | 306.24  | 30        |
| 40        | 377.80 | 385.32 | 392.92 | 400.60  | 408.32  | 40        |
| 50        | 472.25 | 481.65 | 491.15 | 500.75  | 510.40  | 50        |
| 60        | 566.70 | 577.98 | 589.38 | 600.90  | 612.48  | 60        |
| 70        | 661.15 | 674.31 | 687.61 | 701.05  | 714.56  | 70        |
| 80        | 755.60 | 770.64 | 785.84 | 801.20  | 816.64  | 80        |
| 90        | 850.05 | 866.97 | 884.07 | 901.35  | 918.72  | 90        |
| 100       | 944.50 | 963.30 | 982.30 | 1001.50 | 1020.80 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 10.6          | 10.7    | 10.8    | 10.9    |                |
| 10             | 104.04        | 106.01  | 108.00  | 110.01  | 10             |
| 20             | 208.08        | 212.02  | 216.00  | 220.02  | 20             |
| 30             | 312.12        | 318.03  | 324.00  | 330.03  | 30             |
| 40             | 416.16        | 424.04  | 432.00  | 440.04  | 40             |
| 50             | 520.20        | 530.05  | 540.00  | 550.05  | 50             |
| 60             | 624.24        | 636.06  | 648.00  | 660.06  | 60             |
| 70             | 728.28        | 742.07  | 756.00  | 770.07  | 70             |
| 80             | 832.32        | 848.08  | 864.00  | 880.08  | 80             |
| 90             | 936.36        | 954.09  | 972.00  | 990.09  | 90             |
| 100            | 1040.40       | 1060.10 | 1080.00 | 1100.10 | 100            |

| <i>L.</i> | 11.0    | 11.1    | 11.2    | 11.3    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 112.04  | 114.08  | 116.15  | 118.23  | 10        |
| 20        | 224.08  | 226.16  | 232.30  | 236.46  | 20        |
| 30        | 336.12  | 342.24  | 348.45  | 354.69  | 30        |
| 40        | 448.16  | 456.32  | 464.60  | 472.92  | 40        |
| 50        | 560.20  | 570.40  | 580.75  | 591.15  | 50        |
| 60        | 672.24  | 684.48  | 696.90  | 709.38  | 60        |
| 70        | 784.28  | 798.56  | 813.05  | 827.61  | 70        |
| 80        | 896.32  | 912.64  | 929.20  | 945.84  | 80        |
| 90        | 1008.36 | 1026.72 | 1045.35 | 1064.07 | 90        |
| 100       | 1120.40 | 1140.80 | 1161.50 | 1182.30 | 100       |

| <i>L.</i> | 11.4    | 11.5    | 11.6    | 11.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 120.33  | 122.45  | 124.59  | 126.75  | 10        |
| 20        | 240.66  | 244.90  | 249.18  | 253.50  | 20        |
| 30        | 360.99  | 367.35  | 373.77  | 380.25  | 30        |
| 40        | 481.32  | 489.80  | 498.36  | 507.00  | 40        |
| 50        | 601.65  | 612.25  | 622.95  | 633.75  | 50        |
| 60        | 721.98  | 734.70  | 747.54  | 760.50  | 60        |
| 70        | 842.31  | 857.15  | 872.13  | 887.25  | 70        |
| 80        | 962.64  | 979.60  | 996.72  | 1014.00 | 80        |
| 90        | 1082.97 | 1102.05 | 1121.31 | 1140.75 | 90        |
| 100       | 1203.30 | 1224.50 | 1245.90 | 1267.50 | 100       |



*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 11.8          | 11.9    | 12.0    | 12.1    |                |
| 10             | 128.93        | 131.12  | 133.33  | 135.56  | 10             |
| 20             | 257.86        | 262.24  | 266.66  | 271.12  | 20             |
| 30             | 386.79        | 393.36  | 399.99  | 406.68  | 30             |
| 40             | 515.72        | 524.48  | 533.32  | 542.24  | 40             |
| 50             | 644.65        | 655.60  | 666.65  | 677.80  | 50             |
| 60             | 773.58        | 786.72  | 799.98  | 813.36  | 60             |
| 70             | 902.51        | 917.84  | 933.31  | 948.92  | 70             |
| 80             | 1031.44       | 1048.96 | 1066.64 | 1084.48 | 80             |
| 90             | 1160.37       | 1180.08 | 1199.97 | 1220.04 | 90             |
| 100            | 1289.30       | 1311.20 | 1333.30 | 1355.60 | 100            |

| <i>L.</i> | 12.2    | 12.3    | 12.4    | 12.5    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 137.81  | 140.08  | 142.37  | 144.68  | 10        |
| 20        | 275.62  | 280.16  | 284.74  | 289.36  | 20        |
| 30        | 413.43  | 420.24  | 427.11  | 434.04  | 30        |
| 40        | 551.24  | 560.32  | 569.48  | 578.72  | 40        |
| 50        | 689.05  | 700.40  | 711.85  | 723.40  | 50        |
| 60        | 826.86  | 840.48  | 854.22  | 868.08  | 60        |
| 70        | 964.67  | 980.56  | 996.59  | 1012.76 | 70        |
| 80        | 1102.48 | 1120.64 | 1138.96 | 1157.44 | 80        |
| 90        | 1240.29 | 1260.72 | 1281.33 | 1302.12 | 90        |
| 100       | 1378.10 | 1400.80 | 1423.70 | 1446.80 | 100       |

| <i>L.</i> | 12.6    | 12.7    | 12.8    | 12.9    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 147.00  | 149.34  | 151.70  | 154.08  | 10        |
| 20        | 294.00  | 298.68  | 303.40  | 308.16  | 20        |
| 30        | 441.00  | 448.02  | 455.10  | 462.24  | 30        |
| 40        | 588.00  | 597.36  | 606.80  | 616.32  | 40        |
| 50        | 735.00  | 746.70  | 758.50  | 770.40  | 50        |
| 60        | 882.00  | 896.04  | 910.20  | 924.48  | 60        |
| 70        | 1029.00 | 1045.38 | 1061.90 | 1078.56 | 70        |
| 80        | 1176.00 | 1194.72 | 1213.60 | 1232.64 | 80        |
| 90        | 1323.00 | 1344.06 | 1365.30 | 1386.72 | 90        |
| 100       | 1470.00 | 1493.40 | 1517.00 | 1540.80 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 13.0          | 13.1    | 13.2    | 13.3    |                |
| 10             | 156.48        | 158.90  | 161.33  | 163.79  | 10             |
| 20             | 312.96        | 317.80  | 322.66  | 327.58  | 20             |
| 30             | 469.44        | 476.70  | 483.99  | 491.37  | 30             |
| 40             | 625.92        | 635.60  | 645.32  | 655.16  | 40             |
| 50             | 782.40        | 794.50  | 806.65  | 818.95  | 50             |
| 60             | 938.88        | 953.40  | 967.98  | 982.74  | 60             |
| 70             | 1095.36       | 1112.30 | 1129.31 | 1146.53 | 70             |
| 80             | 1251.84       | 1271.20 | 1290.64 | 1310.32 | 80             |
| 90             | 1408.32       | 1430.10 | 1451.97 | 1474.11 | 90             |
| 100            | 1564.80       | 1589.00 | 1613.30 | 1637.90 | 100            |

| <i>L.</i> | 13.4    | 13.5    | 13.6    | 13.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 166.26  | 168.75  | 171.26  | 173.79  | 10        |
| 20        | 332.52  | 337.50  | 342.52  | 347.58  | 20        |
| 30        | 498.78  | 506.25  | 513.78  | 521.37  | 30        |
| 40        | 665.04  | 675.00  | 685.04  | 695.16  | 40        |
| 50        | 831.30  | 843.75  | 856.30  | 868.95  | 50        |
| 60        | 997.56  | 1012.50 | 1027.56 | 1042.74 | 60        |
| 70        | 1163.82 | 1181.25 | 1198.82 | 1216.53 | 70        |
| 80        | 1330.08 | 1350.00 | 1370.08 | 1390.32 | 80        |
| 90        | 1496.34 | 1518.75 | 1541.34 | 1564.11 | 90        |
| 100       | 1662.60 | 1687.50 | 1712.60 | 1737.90 | 100       |

| <i>L.</i> | 13.8    | 13.9    | 14.0    | 14.1    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 176.33  | 178.90  | 181.48  | 184.08  | 10        |
| 20        | 352.66  | 357.80  | 362.96  | 368.16  | 20        |
| 30        | 528.99  | 536.70  | 544.44  | 552.24  | 30        |
| 40        | 705.32  | 715.60  | 725.92  | 736.32  | 40        |
| 50        | 881.65  | 894.50  | 907.40  | 920.40  | 50        |
| 60        | 1057.98 | 1073.40 | 1088.88 | 1104.48 | 60        |
| 70        | 1234.31 | 1252.30 | 1270.36 | 1288.56 | 70        |
| 80        | 1410.64 | 1431.20 | 1451.84 | 1472.64 | 80        |
| 90        | 1586.97 | 1610.10 | 1633.32 | 1656.72 | 90        |
| 100       | 1763.30 | 1789.00 | 1814.80 | 1840.80 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 14.2          | 14.3    | 14.4    | 14.5    |                |
| 10             | 186.70        | 189.34  | 192.00  | 194.68  | 10             |
| 20             | 373.40        | 378.68  | 384.00  | 389.36  | 20             |
| 30             | 560.10        | 568.02  | 576.00  | 584.04  | 30             |
| 40             | 746.80        | 757.36  | 768.00  | 778.72  | 40             |
| 50             | 933.50        | 946.70  | 960.00  | 973.40  | 50             |
| 60             | 1120.20       | 1136.04 | 1152.00 | 1168.08 | 60             |
| 70             | 1306.90       | 1325.38 | 1344.00 | 1362.76 | 70             |
| 80             | 1493.60       | 1514.72 | 1536.00 | 1557.44 | 80             |
| 90             | 1680.30       | 1704.06 | 1728.00 | 1752.12 | 90             |
| 100            | 1867.00       | 1893.40 | 1920.00 | 1946.80 | 100            |

| <i>L.</i> | 14.6    | 14.7    | 14.8    | 14.9    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 197.37  | 200.08  | 202.81  | 205.56  | 10        |
| 20        | 394.74  | 400.16  | 405.62  | 411.12  | 20        |
| 30        | 592.11  | 600.24  | 608.43  | 616.68  | 30        |
| 40        | 789.48  | 800.32  | 811.24  | 822.24  | 40        |
| 50        | 986.85  | 1000.40 | 1014.05 | 1027.80 | 50        |
| 60        | 1184.22 | 1200.48 | 1216.86 | 1233.36 | 60        |
| 70        | 1381.59 | 1400.56 | 1419.67 | 1438.92 | 70        |
| 80        | 1578.96 | 1600.64 | 1622.48 | 1644.48 | 80        |
| 90        | 1776.33 | 1800.72 | 1825.29 | 1850.04 | 90        |
| 100       | 1973.70 | 2000.80 | 2028.10 | 2055.60 | 100       |

| <i>L.</i> | 15.0    | 15.1    | 15.2    | 15.3    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 208.33  | 211.12  | 213.93  | 216.75  | 10        |
| 20        | 416.66  | 422.24  | 427.86  | 433.50  | 20        |
| 30        | 624.99  | 633.36  | 641.79  | 650.25  | 30        |
| 40        | 833.32  | 844.48  | 855.72  | 867.00  | 40        |
| 50        | 1041.65 | 1055.60 | 1069.65 | 1083.75 | 50        |
| 60        | 1249.98 | 1266.72 | 1283.58 | 1300.50 | 60        |
| 70        | 1458.31 | 1477.84 | 1497.51 | 1517.25 | 70        |
| 80        | 1666.64 | 1688.96 | 1711.44 | 1734.00 | 80        |
| 90        | 1874.97 | 1900.08 | 1925.37 | 1950.75 | 90        |
| 100       | 2083.30 | 2111.20 | 2139.30 | 2167.50 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 15.4          | 15.5    | 15.6    | 15.7    |                |
| 10             | 219.59        | 222.45  | 225.33  | 228.23  | 10             |
| 20             | 439.18        | 444.90  | 450.66  | 456.46  | 20             |
| 30             | 658.77        | 667.35  | 675.99  | 684.69  | 30             |
| 40             | 878.36        | 889.80  | 901.32  | 912.92  | 40             |
| 50             | 1097.95       | 1112.25 | 1126.65 | 1141.15 | 50             |
| 60             | 1317.54       | 1334.70 | 1351.98 | 1369.38 | 60             |
| 70             | 1537.13       | 1557.15 | 1577.31 | 1597.61 | 70             |
| 80             | 1756.72       | 1779.60 | 1802.64 | 1825.84 | 80             |
| 90             | 1976.31       | 2002.05 | 2027.97 | 2054.07 | 90             |
| 100            | 2195.90       | 2224.50 | 2253.30 | 2282.30 | 100            |

| <i>L.</i> | 15.8    | 15.9    | 16.0    | 16.1    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 231.15  | 234.08  | 237.04  | 240.01  | 10        |
| 20        | 462.30  | 468.16  | 474.08  | 480.02  | 20        |
| 30        | 693.45  | 702.24  | 711.12  | 720.03  | 30        |
| 40        | 924.60  | 936.32  | 948.16  | 960.04  | 40        |
| 50        | 1155.75 | 1170.40 | 1185.20 | 1200.05 | 50        |
| 60        | 1386.90 | 1404.48 | 1422.24 | 1440.06 | 60        |
| 70        | 1618.05 | 1638.56 | 1659.28 | 1680.07 | 70        |
| 80        | 1849.20 | 1872.64 | 1896.32 | 1920.08 | 80        |
| 90        | 2080.35 | 2106.72 | 2133.36 | 2160.09 | 90        |
| 100       | 2311.50 | 2340.80 | 2370.40 | 2400.10 | 100       |

| <i>L.</i> | 16.2    | 16.3    | 16.4    | 16.5    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 243.00  | 246.01  | 249.04  | 252.08  | 10        |
| 20        | 486.00  | 492.02  | 498.08  | 504.16  | 20        |
| 30        | 729.00  | 738.03  | 747.12  | 756.24  | 30        |
| 40        | 972.00  | 984.04  | 996.16  | 1008.32 | 40        |
| 50        | 1215.00 | 1230.05 | 1245.20 | 1260.40 | 50        |
| 60        | 1458.00 | 1476.06 | 1494.24 | 1512.48 | 60        |
| 70        | 1701.00 | 1722.07 | 1743.28 | 1764.56 | 70        |
| 80        | 1944.00 | 1968.08 | 1992.32 | 2016.64 | 80        |
| 90        | 2187.00 | 2214.09 | 2241.36 | 2268.72 | 90        |
| 100       | 2430.00 | 2460.10 | 2490.40 | 2520.80 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 16.6          | 16.7    | 16.8    | 16.9    |                |
| 10             | 255.15        | 258.23  | 261.33  | 264.45  | 10             |
| 20             | 510.30        | 516.46  | 522.66  | 528.90  | 20             |
| 30             | 765.45        | 774.69  | 783.99  | 793.35  | 30             |
| 40             | 1020.60       | 1032.92 | 1045.32 | 1057.80 | 40             |
| 50             | 1275.75       | 1291.15 | 1306.65 | 1322.25 | 50             |
| 60             | 1530.90       | 1549.38 | 1567.98 | 1586.70 | 60             |
| 70             | 1786.05       | 1807.61 | 1829.31 | 1851.15 | 70             |
| 80             | 2041.20       | 2065.84 | 2090.64 | 2115.60 | 80             |
| 90             | 2296.35       | 2324.07 | 2351.97 | 2380.05 | 90             |
| 100            | 2551.50       | 2582.30 | 2613.30 | 2644.50 | 100            |

| <i>L.</i> | 17.0    | 17.1    | 17.2    | 17.3    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 267.59  | 270.75  | 273.93  | 277.12  | 10        |
| 20        | 535.18  | 541.50  | 547.86  | 554.24  | 20        |
| 30        | 802.77  | 812.25  | 821.79  | 831.36  | 30        |
| 40        | 1070.36 | 1083.00 | 1095.72 | 1108.48 | 40        |
| 50        | 1337.95 | 1353.75 | 1369.65 | 1385.60 | 50        |
| 60        | 1605.54 | 1624.50 | 1643.58 | 1662.72 | 60        |
| 70        | 1873.13 | 1895.25 | 1917.51 | 1939.84 | 70        |
| 80        | 2140.72 | 2166.00 | 2191.44 | 2216.96 | 80        |
| 90        | 2408.31 | 2436.75 | 2465.37 | 2494.08 | 90        |
| 100       | 2675.90 | 2707.50 | 2739.30 | 2771.20 | 100       |

| <i>L.</i> | 17.4    | 17.5    | 17.6    | 17.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 280.33  | 283.56  | 286.81  | 290.08  | 10        |
| 20        | 560.66  | 567.12  | 573.62  | 580.16  | 20        |
| 30        | 840.99  | 850.68  | 860.43  | 870.24  | 30        |
| 40        | 1121.32 | 1134.24 | 1147.24 | 1160.32 | 40        |
| 50        | 1401.65 | 1417.80 | 1434.05 | 1450.40 | 50        |
| 60        | 1681.98 | 1701.36 | 1720.86 | 1740.48 | 60        |
| 70        | 1962.31 | 1984.92 | 2007.67 | 2030.56 | 70        |
| 80        | 2242.64 | 2268.48 | 2294.48 | 2320.64 | 80        |
| 90        | 2522.97 | 2552.04 | 2581.29 | 2610.72 | 90        |
| 100       | 2803.30 | 2835.60 | 2868.10 | 2900.80 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 17.8          | 17.9    | 18.0    | 18.1    |                |
| 10             | 298.37        | 296.68  | 300.00  | 303.34  | 10             |
| 20             | 586.74        | 593.36  | 600.00  | 606.68  | 20             |
| 30             | 880.11        | 890.04  | 900.00  | 910.02  | 30             |
| 40             | 1173.48       | 1186.72 | 1200.00 | 1213.36 | 40             |
| 50             | 1466.85       | 1483.40 | 1500.00 | 1516.70 | 50             |
| 60             | 1760.22       | 1780.08 | 1800.00 | 1820.04 | 60             |
| 70             | 2053.59       | 2076.76 | 2100.00 | 2123.38 | 70             |
| 80             | 2346.96       | 2373.44 | 2400.00 | 2426.72 | 80             |
| 90             | 2640.33       | 2670.12 | 2700.00 | 2730.06 | 90             |
| 100            | 2933.70       | 2966.80 | 3000.00 | 3033.40 | 100            |

| <i>L.</i> | 18.2    | 18.3    | 18.4    | 18.5    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 306.70  | 310.08  | 313.48  | 316.90  | 10        |
| 20        | 613.40  | 620.16  | 626.96  | 633.80  | 20        |
| 30        | 920.10  | 930.24  | 940.44  | 950.70  | 30        |
| 40        | 1226.80 | 1240.32 | 1253.92 | 1267.60 | 40        |
| 50        | 1533.50 | 1550.40 | 1567.40 | 1584.50 | 50        |
| 60        | 1840.20 | 1860.48 | 1880.88 | 1901.40 | 60        |
| 70        | 2146.90 | 2170.56 | 2194.36 | 2218.30 | 70        |
| 80        | 2453.60 | 2480.64 | 2507.84 | 2535.20 | 80        |
| 90        | 2760.30 | 2790.72 | 2821.32 | 2852.10 | 90        |
| 100       | 3067.00 | 3100.80 | 3134.80 | 3169.00 | 100       |

| <i>L.</i> | 18.6    | 18.7    | 18.8    | 18.9    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 320.33  | 323.79  | 327.26  | 330.75  | 10        |
| 20        | 640.66  | 647.58  | 654.52  | 661.50  | 20        |
| 30        | 960.99  | 971.37  | 981.78  | 992.25  | 30        |
| 40        | 1281.32 | 1295.16 | 1309.04 | 1323.00 | 40        |
| 50        | 1601.65 | 1618.95 | 1636.30 | 1653.75 | 50        |
| 60        | 1921.98 | 1942.74 | 1963.56 | 1984.50 | 60        |
| 70        | 2242.31 | 2266.53 | 2290.82 | 2315.25 | 70        |
| 80        | 2562.64 | 2590.32 | 2618.08 | 2646.00 | 80        |
| 90        | 2882.97 | 2914.11 | 2945.34 | 2976.75 | 90        |
| 100       | 3203.30 | 3237.90 | 3272.60 | 3307.50 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 19.0          | 19.1    | 19.2    | 19.3    |                |
| 10             | 334.26        | 337.79  | 341.33  | 344.90  | 10             |
| 20             | 668.52        | 675.58  | 682.66  | 689.80  | 20             |
| 30             | 1002.78       | 1013.37 | 1023.99 | 1034.70 | 30             |
| 40             | 1337.04       | 1351.16 | 1365.32 | 1379.60 | 40             |
| 50             | 1671.30       | 1688.95 | 1706.65 | 1724.50 | 50             |
| 60             | 2005.56       | 2026.74 | 2047.98 | 2069.40 | 60             |
| 70             | 2339.82       | 2364.53 | 2389.31 | 2414.30 | 70             |
| 80             | 2674.08       | 2702.32 | 2730.64 | 2759.20 | 80             |
| 90             | 3008.34       | 3040.11 | 3071.97 | 3104.10 | 90             |
| 100            | 3342.60       | 3377.90 | 3413.30 | 3449.00 | 100            |

| <i>L.</i> | 19.4    | 19.5    | 19.6    | 19.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 348.48  | 352.08  | 355.70  | 359.34  | 10        |
| 20        | 696.96  | 704.16  | 711.40  | 718.68  | 20        |
| 30        | 1045.44 | 1056.24 | 1067.10 | 1078.02 | 30        |
| 40        | 1393.92 | 1408.32 | 1422.80 | 1437.36 | 40        |
| 50        | 1742.40 | 1760.40 | 1778.50 | 1796.70 | 50        |
| 60        | 2090.88 | 2112.48 | 2134.20 | 2156.04 | 60        |
| 70        | 2439.36 | 2464.56 | 2489.90 | 2515.38 | 70        |
| 80        | 2787.84 | 2816.64 | 2845.60 | 2874.72 | 80        |
| 90        | 3136.32 | 3168.72 | 3201.30 | 3234.06 | 90        |
| 100       | 3484.80 | 3520.80 | 3557.00 | 3593.40 | 100       |

| <i>L.</i> | 19.8    | 19.9    | 20.0    | 20.1    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 363.00  | 366.68  | 370.37  | 374.08  | 10        |
| 20        | 726.00  | 733.36  | 740.74  | 748.16  | 20        |
| 30        | 1089.00 | 1100.04 | 1111.11 | 1122.24 | 30        |
| 40        | 1452.00 | 1466.72 | 1481.48 | 1496.32 | 40        |
| 50        | 1815.00 | 1833.40 | 1851.85 | 1870.40 | 50        |
| 60        | 2178.00 | 2200.08 | 2222.22 | 2244.48 | 60        |
| 70        | 2541.00 | 2566.76 | 2592.59 | 2618.56 | 70        |
| 80        | 2904.00 | 2933.44 | 2962.96 | 2992.64 | 80        |
| 90        | 3267.00 | 3300.12 | 3333.33 | 3366.72 | 90        |
| 100       | 3630.00 | 3666.80 | 3703.70 | 3740.80 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 20.2          | 20.3    | 20.4    | 20.5    |                |
| 10             | 377.81        | 381.56  | 385.33  | 389.12  | 10             |
| 20             | 755.62        | 763.12  | 770.66  | 778.24  | 20             |
| 30             | 1133.43       | 1144.68 | 1155.99 | 1167.36 | 30             |
| 40             | 1511.24       | 1526.24 | 1541.32 | 1556.48 | 40             |
| 50             | 1889.05       | 1907.80 | 1926.65 | 1945.60 | 50             |
| 60             | 2266.86       | 2289.36 | 2311.98 | 2334.72 | 60             |
| 70             | 2644.67       | 2670.92 | 2697.31 | 2723.84 | 70             |
| 80             | 3022.48       | 3052.48 | 3082.64 | 3112.96 | 80             |
| 90             | 3400.29       | 3434.04 | 3467.97 | 3502.08 | 90             |
| 100            | 3778.10       | 3815.60 | 3853.30 | 3891.20 | 100            |

| <i>L.</i> | 20.6    | 20.7    | 20.8    | 20.9    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 392.93  | 396.75  | 400.59  | 404.45  | 10        |
| 20        | 785.86  | 793.50  | 801.18  | 808.90  | 20        |
| 30        | 1178.79 | 1190.25 | 1201.77 | 1213.35 | 30        |
| 40        | 1571.72 | 1587.00 | 1602.36 | 1617.80 | 40        |
| 50        | 1964.65 | 1983.75 | 2002.95 | 2022.25 | 50        |
| 60        | 2357.58 | 2380.50 | 2403.54 | 2426.70 | 60        |
| 70        | 2750.51 | 2777.25 | 2804.13 | 2831.15 | 70        |
| 80        | 3143.44 | 3174.00 | 3204.72 | 3235.60 | 80        |
| 90        | 3536.37 | 3570.75 | 3605.31 | 3640.05 | 90        |
| 100       | 3929.30 | 3967.50 | 4005.90 | 4044.50 | 100       |

| <i>L.</i> | 21.0    | 21.1    | 21.2    | 21.3    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 408.33  | 412.23  | 416.15  | 420.08  | 10        |
| 20        | 816.66  | 824.46  | 832.30  | 840.16  | 20        |
| 30        | 1224.99 | 1236.69 | 1248.45 | 1260.24 | 30        |
| 40        | 1633.32 | 1648.92 | 1664.60 | 1680.32 | 40        |
| 50        | 2041.65 | 2061.15 | 2080.75 | 2100.40 | 50        |
| 60        | 2449.98 | 2473.38 | 2496.90 | 2520.48 | 60        |
| 70        | 2858.31 | 2885.61 | 2913.05 | 2940.56 | 70        |
| 80        | 3266.64 | 3297.84 | 3329.20 | 3360.64 | 80        |
| 90        | 3674.97 | 3710.07 | 3745.35 | 3780.72 | 90        |
| 100       | 4083.30 | 4122.30 | 4161.50 | 4200.80 | 100       |



*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 21.4          | 21.5    | 21.6    | 21.7    |                |
| 10             | 424.04        | 428.01  | 432.00  | 436.01  | 10             |
| 20             | 848.08        | 856.02  | 864.00  | 872.02  | 20             |
| 30             | 1272.12       | 1284.03 | 1296.00 | 1308.03 | 30             |
| 40             | 1696.16       | 1712.04 | 1728.00 | 1744.04 | 40             |
| 50             | 2120.20       | 2140.05 | 2160.00 | 2180.05 | 50             |
| 60             | 2544.24       | 2568.06 | 2592.00 | 2616.06 | 60             |
| 70             | 2968.28       | 2996.07 | 3024.00 | 3052.07 | 70             |
| 80             | 3392.32       | 3424.08 | 3456.00 | 3488.08 | 80             |
| 90             | 3816.36       | 3852.09 | 3888.00 | 3924.09 | 90             |
| 100            | 4240.40       | 4280.10 | 4320.00 | 4360.10 | 100            |

| <i>L.</i> | 21.8    | 21.9    | 22.0    | 22.1    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 440.04  | 444.08  | 448.15  | 452.23  | 10        |
| 20        | 880.08  | 888.16  | 896.30  | 904.46  | 20        |
| 30        | 1320.12 | 1332.24 | 1344.45 | 1356.69 | 30        |
| 40        | 1760.16 | 1776.32 | 1792.60 | 1808.92 | 40        |
| 50        | 2200.20 | 2220.40 | 2240.75 | 2261.15 | 50        |
| 60        | 2640.24 | 2664.48 | 2688.90 | 2713.38 | 60        |
| 70        | 3080.28 | 3108.56 | 3137.05 | 3165.61 | 70        |
| 80        | 3520.32 | 3552.64 | 3585.20 | 3617.84 | 80        |
| 90        | 3960.36 | 3996.72 | 4033.35 | 4070.07 | 90        |
| 100       | 4400.40 | 4440.80 | 4481.50 | 4522.30 | 100       |

| <i>L.</i> | 22.2    | 22.3    | 22.4    | 22.5    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 456.33  | 460.45  | 464.59  | 468.75  | 10        |
| 20        | 912.66  | 920.90  | 929.18  | 937.50  | 20        |
| 30        | 1368.99 | 1381.35 | 1393.77 | 1406.25 | 30        |
| 40        | 1825.32 | 1841.80 | 1858.36 | 1875.00 | 40        |
| 50        | 2281.65 | 2302.25 | 2322.95 | 2343.75 | 50        |
| 60        | 2737.98 | 2762.70 | 2787.54 | 2812.50 | 60        |
| 70        | 3194.31 | 3223.15 | 3252.13 | 3281.25 | 70        |
| 80        | 3650.64 | 3683.60 | 3716.72 | 3750.00 | 80        |
| 90        | 4106.97 | 4144.05 | 4181.31 | 4218.75 | 90        |
| 100       | 4563.30 | 4604.50 | 4645.90 | 4687.50 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 22.6          | 22.7    | 22.8    | 22.9    |                |
| 10             | 472.93        | 477.12  | 481.33  | 485.56  | 10             |
| 20             | 945.86        | 954.24  | 962.66  | 971.12  | 20             |
| 30             | 1418.79       | 1431.36 | 1443.99 | 1456.68 | 30             |
| 40             | 1891.72       | 1908.48 | 1925.32 | 1942.24 | 40             |
| 50             | 2364.65       | 2385.60 | 2406.65 | 2427.80 | 50             |
| 60             | 2837.58       | 2862.72 | 2887.98 | 2913.36 | 60             |
| 70             | 3310.51       | 3339.84 | 3369.31 | 3398.92 | 70             |
| 80             | 3783.44       | 3816.96 | 3850.64 | 3884.48 | 80             |
| 90             | 4256.37       | 4294.08 | 4331.97 | 4370.04 | 90             |
| 100            | 4729.30       | 4771.20 | 4813.30 | 4855.60 | 100            |

| <i>L.</i> | 23.0    | 23.1    | 23.2    | 23.3    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 489.81  | 494.08  | 498.37  | 502.68  | 10        |
| 20        | 979.62  | 988.16  | 996.74  | 1005.36 | 20        |
| 30        | 1469.43 | 1482.24 | 1495.11 | 1508.04 | 30        |
| 40        | 1959.24 | 1976.32 | 1993.48 | 2010.72 | 40        |
| 50        | 2449.05 | 2470.40 | 2491.85 | 2513.40 | 50        |
| 60        | 2938.86 | 2964.48 | 2990.22 | 3016.08 | 60        |
| 70        | 3428.67 | 3458.56 | 3488.59 | 3518.76 | 70        |
| 80        | 3918.48 | 3952.64 | 3986.96 | 4021.44 | 80        |
| 90        | 4408.29 | 4446.72 | 4485.33 | 4524.12 | 90        |
| 100       | 4898.10 | 4940.80 | 4983.70 | 5026.80 | 100       |

| <i>L.</i> | 23.4    | 23.5    | 23.6    | 23.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 507.00  | 511.34  | 515.70  | 520.08  | 10        |
| 20        | 1014.00 | 1022.68 | 1031.40 | 1040.16 | 20        |
| 30        | 1521.00 | 1534.02 | 1547.10 | 1560.24 | 30        |
| 40        | 2028.00 | 2045.36 | 2062.80 | 2080.32 | 40        |
| 50        | 2535.00 | 2556.70 | 2578.50 | 2600.40 | 50        |
| 60        | 3042.00 | 3068.04 | 3094.20 | 3120.48 | 60        |
| 70        | 3549.00 | 3579.38 | 3609.90 | 3640.56 | 70        |
| 80        | 4056.00 | 4090.72 | 4125.60 | 4160.64 | 80        |
| 90        | 4563.00 | 4602.06 | 4641.30 | 4680.72 | 90        |
| 100       | 5070.00 | 5113.40 | 5157.00 | 5200.80 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 23.8          | 23.9    | 2 0     | 24 1    |                |
| 10             | 524.48        | 528.90  | 533.33  | 537.79  | 10             |
| 20             | 1048.96       | 1057.80 | 1066.66 | 1075.58 | 20             |
| 30             | 1573.44       | 1586.70 | 1599.99 | 1613.37 | 30             |
| 40             | 2097.92       | 2115.60 | 2133.32 | 2151.16 | 40             |
| 50             | 2622.40       | 2644.50 | 2666.65 | 2688.95 | 50             |
| 60             | 3146.88       | 3173.40 | 3199.98 | 3226.74 | 60             |
| 70             | 3671.36       | 3702.30 | 3733.31 | 3764.53 | 70             |
| 80             | 4195.84       | 4231.20 | 4266.64 | 4302.32 | 80             |
| 90             | 4720.32       | 4760.10 | 4799.97 | 4840.11 | 90             |
| 100            | 5244.80       | 5289.00 | 5333.30 | 5377.90 | 100            |

| <i>L.</i> | 24.2    | 24.3    | 24.4    | 24.5    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 542.26  | 546.75  | 551.26  | 555.79  | 10        |
| 20        | 1084.52 | 1093.50 | 1102.52 | 1111.58 | 20        |
| 30        | 1626.78 | 1640.25 | 1653.78 | 1667.37 | 30        |
| 40        | 2169.04 | 2187.00 | 2205.04 | 2223.16 | 40        |
| 50        | 2711.30 | 2733.75 | 2756.30 | 2778.95 | 50        |
| 60        | 3253.56 | 3280.50 | 3307.56 | 3334.74 | 60        |
| 70        | 3795.82 | 3827.25 | 3858.82 | 3890.53 | 70        |
| 80        | 4338.08 | 4374.00 | 4410.08 | 4446.32 | 80        |
| 90        | 4880.34 | 4920.75 | 4961.34 | 5002.11 | 90        |
| 100       | 5422.60 | 5467.50 | 5512.60 | 5557.90 | 100       |

| <i>L.</i> | 24.6    | 24.7    | 24.8    | 24.9    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 560.33  | 564.90  | 569.48  | 574.08  | 10        |
| 20        | 1120.66 | 1129.80 | 1138.96 | 1148.16 | 20        |
| 30        | 1680.99 | 1694.70 | 1708.44 | 1722.24 | 30        |
| 40        | 2241.32 | 2259.60 | 2277.92 | 2296.32 | 40        |
| 50        | 2801.65 | 2824.50 | 2847.40 | 2870.40 | 50        |
| 60        | 3361.98 | 3389.40 | 3416.88 | 3444.48 | 60        |
| 70        | 3922.31 | 3954.30 | 3986.36 | 4018.56 | 70        |
| 80        | 4482.64 | 4519.20 | 4555.84 | 4592.64 | 80        |
| 90        | 5042.97 | 5084.10 | 5125.32 | 5166.72 | 90        |
| 100       | 5603.30 | 5649.00 | 5694.80 | 5740.80 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 25.0          | 25.1    | 25.2    | 25.3    |                |
| 10             | 578.70        | 583.34  | 588.00  | 592.68  | 10             |
| 20             | 1157.40       | 1166.68 | 1176.00 | 1185.36 | 20             |
| 30             | 1736.10       | 1750.02 | 1764.00 | 1778.04 | 30             |
| 40             | 2314.80       | 2333.36 | 2352.00 | 2370.72 | 40             |
| 50             | 2893.50       | 2916.70 | 2940.00 | 2963.40 | 50             |
| 60             | 3472.20       | 3500.04 | 3528.00 | 3556.08 | 60             |
| 70             | 4050.90       | 4083.38 | 4116.00 | 4148.76 | 70             |
| 80             | 4629.60       | 4666.72 | 4704.00 | 4741.44 | 80             |
| 90             | 5208.30       | 5250.06 | 5292.00 | 5334.12 | 90             |
| 100            | 5787.00       | 5833.40 | 5880.00 | 5926.80 | 100            |

| <i>L.</i> | 25.4    | 25.5    | 25.6    | 25.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 597.37  | 602.08  | 606.81  | 611.56  | 10        |
| 20        | 1194.74 | 1204.16 | 1213.62 | 1223.12 | 20        |
| 30        | 1792.11 | 1806.24 | 1820.43 | 1834.68 | 30        |
| 40        | 2389.48 | 2408.32 | 2427.24 | 2446.24 | 40        |
| 50        | 2986.85 | 3010.40 | 3034.05 | 3057.80 | 50        |
| 60        | 3584.22 | 3612.48 | 3640.86 | 3669.36 | 60        |
| 70        | 4181.59 | 4214.56 | 4247.67 | 4280.92 | 70        |
| 80        | 4778.96 | 4816.64 | 4854.48 | 4892.48 | 80        |
| 90        | 5376.33 | 5418.72 | 5461.29 | 5504.04 | 90        |
| 100       | 5973.70 | 6020.80 | 6068.10 | 6115.60 | 100       |

| <i>L.</i> | 25.8    | 25.9    | 26.0    | 26.1    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 616.33  | 621.12  | 625.93  | 630.75  | 10        |
| 20        | 1232.66 | 1242.24 | 1251.86 | 1261.50 | 20        |
| 30        | 1848.99 | 1863.36 | 1877.79 | 1892.25 | 30        |
| 40        | 2465.32 | 2484.48 | 2503.72 | 2523.00 | 40        |
| 50        | 3081.65 | 3105.60 | 3129.65 | 3153.75 | 50        |
| 60        | 3697.98 | 3726.72 | 3755.58 | 3784.50 | 60        |
| 70        | 4314.31 | 4347.84 | 4381.51 | 4415.25 | 70        |
| 80        | 4930.64 | 4968.96 | 5007.44 | 5046.00 | 80        |
| 90        | 5546.97 | 5590.08 | 5633.37 | 5676.75 | 90        |
| 100       | 6163.30 | 6211.20 | 6259.30 | 6307.50 | 100       |

*Supplement to table 4.—Slope 2½ to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |         | <i>Length.</i> |
|----------------|---------------|---------|---------|---------|----------------|
|                | 28.6          | 28.7    | 28.8    | 28.9    |                |
| 10             | 757.37        | 762.68  | 768.00  | 773.34  | 10             |
| 20             | 1514.74       | 1525.36 | 1536.00 | 1546.68 | 20             |
| 30             | 2272.11       | 2288.04 | 2304.00 | 2320.02 | 30             |
| 40             | 3029.48       | 3050.72 | 3072.00 | 3093.36 | 40             |
| 50             | 3786.85       | 3813.40 | 3840.00 | 3866.70 | 50             |
| 60             | 4544.22       | 4576.08 | 4608.00 | 4640.04 | 60             |
| 70             | 5301.59       | 5338.76 | 5376.00 | 5413.38 | 70             |
| 80             | 6058.96       | 6101.44 | 6144.00 | 6186.72 | 80             |
| 90             | 6816.33       | 6864.12 | 6912.00 | 6960.06 | 90             |
| 100            | 7573.70       | 7626.80 | 7680.00 | 7733.40 | 100            |

| <i>L.</i> | 29.0    | 29.1    | 29.2    | 29.3    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 778.70  | 784.08  | 789.48  | 794.90  | 10        |
| 20        | 1557.40 | 1568.16 | 1578.96 | 1589.80 | 20        |
| 30        | 2336.10 | 2352.24 | 2368.44 | 2384.70 | 30        |
| 40        | 3114.80 | 3136.32 | 3157.92 | 3179.60 | 40        |
| 50        | 3893.50 | 3920.40 | 3947.40 | 3974.50 | 50        |
| 60        | 4672.20 | 4704.48 | 4736.88 | 4769.40 | 60        |
| 70        | 5450.90 | 5488.56 | 5526.36 | 5564.30 | 70        |
| 80        | 6229.60 | 6272.64 | 6315.84 | 6359.20 | 80        |
| 90        | 7008.30 | 7056.72 | 7105.32 | 7154.10 | 90        |
| 100       | 7787.00 | 7840.80 | 7894.80 | 7949.00 | 100       |

| <i>L.</i> | 29.4    | 29.5    | 29.6    | 29.7    | <i>L.</i> |
|-----------|---------|---------|---------|---------|-----------|
| 10        | 800.33  | 805.79  | 811.26  | 816.75  | 10        |
| 20        | 1600.66 | 1611.58 | 1622.52 | 1633.50 | 20        |
| 30        | 2400.99 | 2417.37 | 2433.78 | 2450.25 | 30        |
| 40        | 3201.32 | 3223.16 | 3245.04 | 3267.00 | 40        |
| 50        | 4001.65 | 4028.95 | 4056.30 | 4083.75 | 50        |
| 60        | 4801.98 | 4834.74 | 4867.56 | 4900.50 | 60        |
| 70        | 5602.31 | 5640.53 | 5678.82 | 5717.25 | 70        |
| 80        | 6402.64 | 6446.32 | 6490.08 | 6534.00 | 80        |
| 90        | 7202.97 | 7252.11 | 7301.34 | 7350.75 | 90        |
| 100       | 8003.30 | 8057.90 | 8112.60 | 8167.50 | 100       |

*Supplement to table 4.—Slope  $2\frac{1}{2}$  to 1.—Solid contents.*

| <i>Length.</i> | <i>Depth.</i> |         |         |  | <i>Length.</i> |
|----------------|---------------|---------|---------|--|----------------|
|                | 29.8          | 29.9    | 30.0    |  |                |
| 10             | 822.26        | 827.70  | 833.33  |  | 10             |
| 20             | 1644.52       | 1655.58 | 1666.66 |  | 20             |
| 30             | 2466.78       | 2483.37 | 2499.99 |  | 30             |
| 40             | 3289.04       | 3311.16 | 3333.32 |  | 40             |
| 50             | 4111.30       | 4138.95 | 4166.65 |  | 50             |
| 60             | 4933.56       | 4966.74 | 4999.98 |  | 60             |
| 70             | 5755.82       | 5794.53 | 5833.31 |  | 70             |
| 80             | 6578.08       | 6622.32 | 6666.64 |  | 80             |
| 90             | 7400.34       | 7450.11 | 7499.97 |  | 90             |
| 100            | 8222.60       | 8277.90 | 8333.30 |  | 100            |

*Table 5.—Corrections for difference of end depths of Slope for a slope of  $2\frac{1}{2}$  to 1—length 100 feet.*

| <i>Difference.</i> | <i>Corrections.</i> | <i>Difference.</i> | <i>Corrections.</i> |
|--------------------|---------------------|--------------------|---------------------|
|                    |                     | 4.0                | 12.35               |
| 0.1                | .01                 | .1                 | 12.97               |
| .2                 | .03                 | .2                 | 13.61               |
| .3                 | .07                 | .3                 | 14.27               |
| .4                 | .12                 | .4                 | 14.94               |
| .5                 | .19                 | .5                 | 15.62               |
| .6                 | .28                 | .6                 | 16.33               |
| .7                 | .38                 | .7                 | 17.04               |
| .8                 | .49                 | .8                 | 17.78               |
| .9                 | .62                 | .9                 | 18.53               |
| 1.0                | .77                 | 5.0                | 19.29               |
| .1                 | .93                 | .1                 | 20.07               |
| .2                 | 1.11                | .2                 | 20.86               |
| .3                 | 1.30                | .3                 | 21.67               |
| .4                 | 1.51                | .4                 | 22.50               |
| .5                 | 1.74                | .5                 | 23.34               |
| .6                 | 1.98                | .6                 | 24.20               |
| .7                 | 2.23                | .7                 | 25.07               |
| .8                 | 2.50                | .8                 | 25.96               |
| .9                 | 2.79                | .9                 | 26.86               |
| 2.0                | 3.09                | 6.0                | 27.78               |
| .1                 | 3.40                | .1                 | 28.71               |
| .2                 | 3.73                | .2                 | 29.66               |
| .3                 | 4.08                | .3                 | 30.62               |
| .4                 | 4.44                | .4                 | 31.60               |
| .5                 | 4.82                | .5                 | 32.60               |
| .6                 | 5.22                | .6                 | 33.61               |
| .7                 | 5.62                | .7                 | 34.64               |
| .8                 | 6.05                | .8                 | 35.68               |
| .9                 | 6.49                | .9                 | 36.74               |
| 3.0                | 6.94                | 7.0                | 37.81               |
| .1                 | 7.42                | .1                 | 38.90               |
| .2                 | 7.90                | .2                 | 40.00               |
| .3                 | 8.40                | .3                 | 41.12               |
| .4                 | 8.92                | .4                 | 42.25               |
| .5                 | 9.45                | .5                 | 43.40               |
| .6                 | 10.00               | .6                 | 44.56               |
| .7                 | 10.56               | .7                 | 45.75               |
| .8                 | 11.14               | .8                 | 46.94               |
| .9                 | 11.74               | .9                 | 48.16               |

*Table 5.—Correction for difference of end depths of Slopes,  
for a slope of 2½ to 1—length 100 feet.*

| <i>Difference.</i> | <i>Corrections.</i> | <i>Difference.</i> | <i>Corrections.</i> |
|--------------------|---------------------|--------------------|---------------------|
| 8.0                | 49.38               | 12.0               | 111.11              |
| .1                 | 50.63               | .1                 | 112.97              |
| .2                 | 51.88               | .2                 | 114.85              |
| .3                 | 53.16               | .3                 | 116.74              |
| .4                 | 54.44               | .4                 | 118.64              |
| .5                 | 55.75               | .5                 | 120.56              |
| .6                 | 57.07               | .6                 | 122.50              |
| .7                 | 58.40               | .7                 | 124.45              |
| .8                 | 59.75               | .8                 | 126.42              |
| .9                 | 61.12               | .9                 | 128.40              |
| 9.0                | 62.50               | 13.0               | 130.40              |
| .1                 | 63.90               | .1                 | 132.42              |
| .2                 | 65.31               | .2                 | 134.44              |
| .3                 | 66.74               | .3                 | 136.49              |
| .4                 | 68.18               | .4                 | 138.55              |
| .5                 | 69.64               | .5                 | 140.63              |
| .6                 | 71.11               | .6                 | 142.72              |
| .7                 | 72.60               | .7                 | 144.82              |
| .8                 | 74.10               | .8                 | 146.94              |
| .9                 | 75.63               | .9                 | 149.08              |
| 10.0               | 77.16               | 14.0               | 151.23              |
| .1                 | 78.71               | .1                 | 153.40              |
| .2                 | 80.28               | .2                 | 155.59              |
| .3                 | 81.86               | .3                 | 157.79              |
| .4                 | 83.46               | .4                 | 160.00              |
| .5                 | 85.07               | .5                 | 162.23              |
| .6                 | 86.70               | .6                 | 164.48              |
| .7                 | 88.34               | .7                 | 166.74              |
| .8                 | 90.00               | .8                 | 169.01              |
| .9                 | 91.67               | .9                 | 171.30              |
| 11.0               | 93.36               | 15.0               | 173.61              |
| .1                 | 95.07               | .1                 | 175.93              |
| .2                 | 96.79               | .2                 | 178.27              |
| .3                 | 98.53               | .3                 | 180.63              |
| .4                 | 100.28              | .4                 | 182.99              |
| .5                 | 102.04              | .5                 | 185.38              |
| .6                 | 103.83              | .6                 | 187.78              |
| .7                 | 105.63              | .7                 | 190.19              |
| .8                 | 107.44              | .8                 | 192.62              |
| .9                 | 109.27              | .9                 | 195.07              |



*Table 5.—Corrections for difference of end depths of Slopes,  
for a slope of  $2\frac{1}{2}$  to —length 100 feet.*

| <i>Difference.</i> | <i>Corrections.</i> | <i>Difference.</i> | <i>Corrections.</i> |
|--------------------|---------------------|--------------------|---------------------|
| 16.0               | 197.53              | 20.0               | 308.64              |
| .1                 | 200.01              | .1                 | 311.74              |
| .2                 | 202.50              | .2                 | 314.85              |
| .3                 | 205.01              | .3                 | 317.97              |
| .4                 | 207.53              | .4                 | 321.11              |
| .5                 | 210.07              | .5                 | 324.27              |
| .6                 | 212.62              | .6                 | 327.44              |
| .7                 | 215.19              | .7                 | 330.63              |
| .8                 | 217.78              | .8                 | 333.83              |
| .9                 | 220.38              | .9                 | 337.04              |
| 17.0               | 222.99              | 21.0               | 340.28              |
| .1                 | 225.63              | .1                 | 343.53              |
| .2                 | 228.27              | .2                 | 346.79              |
| .3                 | 230.93              | .3                 | 350.07              |
| .4                 | 233.61              | .4                 | 353.36              |
| .5                 | 236.30              | .5                 | 356.67              |
| .6                 | 239.01              | .6                 | 360.00              |
| .7                 | 241.74              | .7                 | 363.34              |
| .8                 | 244.48              | .8                 | 366.70              |
| .9                 | 247.23              | .9                 | 370.07              |
| 18.0               | 250.00              | 22.0               | 373.46              |
| .1                 | 252.79              | .1                 | 376.86              |
| .2                 | 255.59              | .2                 | 380.28              |
| .3                 | 258.40              | .3                 | 383.71              |
| .4                 | 261.23              | .4                 | 387.16              |
| .5                 | 264.08              | .5                 | 390.63              |
| .6                 | 266.94              | .6                 | 394.10              |
| .7                 | 269.82              | .7                 | 397.60              |
| .8                 | 272.72              | .8                 | 401.11              |
| .9                 | 275.63              | .9                 | 404.64              |
| 19.0               | 278.55              | 23.0               | 408.18              |
| .1                 | 281.49              | .1                 | 411.74              |
| .2                 | 284.44              | .2                 | 415.31              |
| .3                 | 287.42              | .3                 | 418.90              |
| .4                 | 290.40              | .4                 | 422.50              |
| .5                 | 293.40              | .5                 | 426.12              |
| .6                 | 296.42              | .6                 | 429.75              |
| .7                 | 299.45              | .7                 | 433.40              |
| .8                 | 302.50              | .8                 | 437.07              |
| .9                 | 305.56              | .9                 | 440.75              |

ble 5.—*Corrections for difference of end depths of Slopes, for a slope of  $2\frac{1}{2}$  to 1—length 100 feet.*

| <i>ifference.</i> | <i>Corrections.</i> | <i>Difference.</i> | <i>Corrections.</i> |
|-------------------|---------------------|--------------------|---------------------|
| 24.0              | 444.44              | 28.0               | 604.94              |
| .1                | 448.16              | .1                 | 609.27              |
| .2                | 451.88              | .2                 | 613.61              |
| .3                | 455.63              | .3                 | 617.97              |
| .4                | 459.38              | .4                 | 622.35              |
| .5                | 463.16              | .5                 | 626.74              |
| .6                | 466.94              | .6                 | 631.14              |
| .7                | 470.75              | .7                 | 635.56              |
| .8                | 474.57              | .8                 | 640.00              |
| .9                | 478.40              | .9                 | 644.45              |
| 25.0              | 482.25              | 29.0               | 648.92              |
| .1                | 486.12              | .1                 | 653.40              |
| .2                | 490.00              | .2                 | 657.90              |
| .3                | 493.90              | .3                 | 662.42              |
| .4                | 497.81              | .4                 | 666.94              |
| .5                | 501.74              | .5                 | 671.49              |
| .6                | 505.68              | .6                 | 676.05              |
| .7                | 509.64              | .7                 | 680.63              |
| .8                | 513.61              | .8                 | 685.22              |
| .9                | 517.60              | .9                 | 689.82              |
| 26.0              | 521.60              | 30.0               | 694.44              |
| .1                | 525.63              | .1                 | 699.08              |
| .2                | 529.66              | .2                 | 703.73              |
| .3                | 533.71              | .3                 | 708.40              |
| .4                | 537.78              | .4                 | 713.09              |
| .5                | 541.86              | .5                 | 717.79              |
| .6                | 545.96              | .6                 | 722.50              |
| .7                | 550.07              | .7                 | 727.23              |
| .8                | 554.20              | .8                 | 731.98              |
| .9                | 558.34              | .9                 | 736.74              |
| 27.0              | 562.50              | 31.0               | 741.51              |
| .1                | 566.67              | .1                 | 746.30              |
| .2                | 570.86              | .2                 | 751.11              |
| .3                | 575.07              | .3                 | 755.93              |
| .4                | 579.29              | .4                 | 760.77              |
| .5                | 583.53              | .5                 | 765.63              |
| .6                | 587.78              | .6                 | 770.49              |
| .7                | 592.04              | .7                 | 775.38              |
| .8                | 596.33              | .8                 | 780.28              |
| .9                | 600.63              | .9                 | 785.19              |

**Table 5.**—*Corrections for difference of end depths of Slopes, for a slope of  $2\frac{1}{2}$  to 1—length 100 feet.*

| <i>Difference.</i> | <i>Corrections.</i> | <i>Difference.</i> | <i>Corrections.</i> |
|--------------------|---------------------|--------------------|---------------------|
| 32.0               | 790.12              | 36.0               | 1000.00             |
| .1                 | 795.07              | .1                 | 1005.56             |
| .2                 | 800.03              | .2                 | 1011.14             |
| .3                 | 805.01              | .3                 | 1016.74             |
| .4                 | 810.00              | .4                 | 1022.35             |
| .5                 | 815.01              | .5                 | 1027.97             |
| .6                 | 820.03              | .6                 | 1033.61             |
| .7                 | 825.07              | .7                 | 1039.27             |
| .8                 | 830.12              | .8                 | 1044.94             |
| .9                 | 835.19              | .9                 | 1050.63             |
| 33.0               | 840.28              | 37.0               | 1056.33             |
| .1                 | 845.38              | .1                 | 1062.04             |
| .2                 | 850.49              | .2                 | 1067.78             |
| .3                 | 855.63              | .3                 | 1073.53             |
| .4                 | 860.77              | .4                 | 1079.29             |
| .5                 | 865.93              | .5                 | 1085.07             |
| .6                 | 871.11              | .6                 | 1090.86             |
| .7                 | 876.30              | .7                 | 1096.67             |
| .8                 | 881.51              | .8                 | 1102.50             |
| .9                 | 886.74              | .9                 | 1108.34             |
| 34.0               | 891.98              | 38.0               | 1114.20             |
| .1                 | 897.23              | .1                 | 1120.07             |
| .2                 | 902.50              | .2                 | 1125.96             |
| .3                 | 907.79              | .3                 | 1131.86             |
| .4                 | 913.09              | .4                 | 1137.78             |
| .5                 | 918.40              | .5                 | 1143.71             |
| .6                 | 923.73              | .6                 | 1149.66             |
| .7                 | 929.08              | .7                 | 1155.63             |
| .8                 | 934.44              | .8                 | 1161.61             |
| .9                 | 939.82              | .9                 | 1167.60             |
| 35.0               | 945.22              | 39.0               | 1173.61             |
| .1                 | 950.63              | .1                 | 1179.64             |
| .2                 | 956.05              | .2                 | 1185.68             |
| .3                 | 961.49              | .3                 | 1191.74             |
| .4                 | 966.94              | .4                 | 1197.81             |
| .5                 | 972.42              | .5                 | 1203.90             |
| .6                 | 977.90              | .6                 | 1210.00             |
| .7                 | 983.40              | .7                 | 1216.12             |
| .8                 | 988.92              | .8                 | 1222.25             |
| .9                 | 994.45              | .9                 | 1228.40             |

Supplement to table 5.—Correction of length average—Slope  
 $2\frac{1}{2}$  to 1.

| Length. | Depth. |     |     |     | Length. |
|---------|--------|-----|-----|-----|---------|
|         | 0.1    | 0.2 | 0.3 | 0.4 |         |
| 10      |        |     | .01 | .01 | 10      |
| 20      |        |     | .02 | .02 | 20      |
| 30      |        |     | .03 | .03 | 30      |
| 40      |        |     | .04 | .04 | 40      |
| 50      |        |     | .05 | .05 | 50      |
| 60      |        |     | .06 | .06 | 60      |
| 70      |        |     | .07 | .07 | 70      |
| 80      |        |     | .08 | .08 | 80      |
| 90      |        |     | .09 | .09 | 90      |
| 100     |        |     | .10 | .10 | 100     |

| L.  | 0.5 | 0.6 | 0.7 | 0.8 | L.  |
|-----|-----|-----|-----|-----|-----|
| 10  | .02 | .03 | .04 | .05 | 10  |
| 20  | .04 | .06 | .08 | .10 | 20  |
| 30  | .06 | .09 | .12 | .15 | 30  |
| 40  | .08 | .12 | .16 | .20 | 40  |
| 50  | .10 | .15 | .20 | .25 | 50  |
| 60  | .12 | .18 | .24 | .30 | 60  |
| 70  | .14 | .21 | .28 | .35 | 70  |
| 80  | .16 | .24 | .32 | .40 | 80  |
| 90  | .18 | .27 | .36 | .45 | 90  |
| 100 | .20 | .30 | .40 | .50 | 100 |

| L.  | 0.9 | 1.0 | 1.1 | 1.2  | L.  |
|-----|-----|-----|-----|------|-----|
| 10  | .06 | .08 | .09 | .11  | 10  |
| 20  | .12 | .16 | .18 | .22  | 20  |
| 30  | .18 | .24 | .27 | .33  | 30  |
| 40  | .24 | .32 | .36 | .44  | 40  |
| 50  | .30 | .40 | .45 | .55  | 50  |
| 60  | .36 | .48 | .54 | .66  | 60  |
| 70  | .42 | .56 | .63 | .77  | 70  |
| 80  | .48 | .64 | .72 | .88  | 80  |
| 90  | .54 | .72 | .81 | .99  | 90  |
| 100 | .60 | .80 | .90 | 1.10 | 100 |

Supplement to table 5.—Correction of length average—Slope  
2½ to 1.

| <i>Length.</i> | <i>Depth.</i> |      |      |      | <i>Length.</i> |
|----------------|---------------|------|------|------|----------------|
|                | 1.3           | 1.4  | 1.5  | 1.6  |                |
| 10             | .13           | .15  | .17  | .20  | 10             |
| 20             | .26           | .30  | .34  | .40  | 20             |
| 30             | .39           | .45  | .51  | .60  | 30             |
| 40             | .52           | .60  | .68  | .80  | 40             |
| 50             | .65           | .75  | .85  | 1.00 | 50             |
| 60             | .78           | .90  | 1.02 | 1.20 | 60             |
| 70             | .91           | 1.05 | 1.19 | 1.40 | 70             |
| 80             | 1.04          | 1.20 | 1.36 | 1.60 | 80             |
| 90             | 1.17          | 1.35 | 1.53 | 1.80 | 90             |
| 100            | 1.30          | 1.50 | 1.70 | 2.00 | 100            |

| <i>L.</i> | 1.7  | 1.8  | 1.9  | 2.0  | <i>L.</i> |
|-----------|------|------|------|------|-----------|
| 10        | .22  | .25  | .28  | .31  | 10        |
| 20        | .44  | .50  | .56  | .62  | 20        |
| 30        | .66  | .75  | .84  | .93  | 30        |
| 40        | .88  | 1.00 | 1.12 | 1.24 | 40        |
| 50        | 1.10 | 1.25 | 1.40 | 1.55 | 50        |
| 60        | 1.32 | 1.50 | 1.68 | 1.86 | 60        |
| 70        | 1.54 | 1.75 | 1.96 | 2.17 | 70        |
| 80        | 1.76 | 2.00 | 2.24 | 2.48 | 80        |
| 90        | 1.98 | 2.25 | 2.52 | 2.79 | 90        |
| 100       | 2.20 | 2.50 | 2.80 | 3.10 | 100       |

| <i>L.</i> | 2.1  | 2.2  | 2.3  | 2.4  | <i>L.</i> |
|-----------|------|------|------|------|-----------|
| 10        | .34  | .37  | .41  | .44  | 10        |
| 20        | .68  | .74  | .82  | .88  | 20        |
| 30        | 1.02 | 1.11 | 1.23 | 1.32 | 30        |
| 40        | 1.36 | 1.48 | 1.64 | 1.76 | 40        |
| 50        | 1.70 | 1.85 | 2.05 | 2.20 | 50        |
| 60        | 2.04 | 2.22 | 2.46 | 2.64 | 60        |
| 70        | 2.38 | 2.59 | 2.87 | 3.08 | 70        |
| 80        | 2.72 | 2.96 | 3.28 | 3.52 | 80        |
| 90        | 3.06 | 3.33 | 3.69 | 3.96 | 90        |
| 100       | 3.40 | 3.70 | 4.10 | 4.40 | 100       |

*Supplement to table 5.—Correction of length average.—Slope  
2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |      |      |      | <i>Length.</i> |
|----------------|---------------|------|------|------|----------------|
|                | 2.5           | 2.6  | 2.7  | 2.8  |                |
| 10             | .48           | .52  | .56  | .60  | 10             |
| 20             | .96           | 1.04 | 1.12 | 1.20 | 20             |
| 30             | 1.44          | 1.56 | 1.68 | 1.80 | 30             |
| 40             | 1.92          | 2.08 | 2.24 | 2.40 | 40             |
| 50             | 2.40          | 2.60 | 2.80 | 3.00 | 50             |
| 60             | 2.88          | 3.12 | 3.36 | 3.60 | 60             |
| 70             | 3.36          | 3.64 | 3.92 | 4.20 | 70             |
| 80             | 3.84          | 4.16 | 4.48 | 4.80 | 80             |
| 90             | 4.32          | 4.68 | 5.04 | 5.40 | 90             |
| 100            | 4.80          | 5.20 | 5.60 | 6.00 | 100            |

| <i>L.</i> | 2.9  | 3.0  | 3.1  | 3.2  | <i>L.</i> |
|-----------|------|------|------|------|-----------|
| 10        | .65  | .69  | .74  | .79  | 10        |
| 20        | 1.30 | 1.38 | 1.48 | 1.58 | 20        |
| 30        | 1.95 | 2.07 | 2.22 | 2.37 | 30        |
| 40        | 2.60 | 2.76 | 2.96 | 3.16 | 40        |
| 50        | 3.25 | 3.45 | 3.70 | 3.95 | 50        |
| 60        | 3.90 | 4.14 | 4.44 | 4.74 | 60        |
| 70        | 4.55 | 4.83 | 5.18 | 5.53 | 70        |
| 80        | 5.20 | 5.52 | 5.92 | 6.32 | 80        |
| 90        | 5.85 | 6.21 | 6.66 | 7.11 | 90        |
| 100       | 6.50 | 6.90 | 7.40 | 7.90 | 100       |

| <i>L.</i> | 3.3  | 3.4  | 3.5  | 3.6   | <i>L.</i> |
|-----------|------|------|------|-------|-----------|
| 10        | .84  | .89  | .95  | 1.00  | 10        |
| 20        | 1.68 | 1.78 | 1.90 | 2.00  | 20        |
| 30        | 2.52 | 2.67 | 2.85 | 3.00  | 30        |
| 40        | 3.36 | 3.56 | 3.80 | 4.00  | 40        |
| 50        | 4.20 | 4.45 | 4.75 | 5.00  | 50        |
| 60        | 5.04 | 5.34 | 5.70 | 6.00  | 60        |
| 70        | 5.88 | 6.23 | 6.65 | 7.00  | 70        |
| 80        | 6.72 | 7.12 | 7.60 | 8.00  | 80        |
| 90        | 7.56 | 8.01 | 8.55 | 9.00  | 90        |
| 100       | 8.40 | 8.90 | 9.50 | 10.00 | 100       |

*Supplement to table 5.—Corrections of length average.—Slope  
2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|----------------|
|                | 3.7           | 3.8   | 3.9   | 4.0   |                |
| 10             | 1.06          | 1.11  | 1.17  | 1.23  | 10             |
| 20             | 2.12          | 2.22  | 2.34  | 2.46  | 20             |
| 30             | 3.18          | 3.33  | 3.51  | 3.69  | 30             |
| 40             | 4.24          | 4.44  | 4.68  | 4.92  | 40             |
| 50             | 5.30          | 5.55  | 5.85  | 6.15  | 50             |
| 60             | 6.36          | 6.66  | 7.02  | 7.36  | 60             |
| 70             | 7.42          | 7.77  | 8.19  | 8.61  | 70             |
| 80             | 8.48          | 8.88  | 9.36  | 9.84  | 80             |
| 90             | 9.54          | 9.99  | 10.53 | 11.07 | 90             |
| 100            | 10.60         | 11.10 | 11.70 | 12.30 | 100            |

| <i>L.</i> | 4.1   | 4.2   | 4.3   | 4.4   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 1.30  | 1.36  | 1.43  | 1.49  | 10        |
| 20        | 2.60  | 2.72  | 2.86  | 2.98  | 20        |
| 30        | 3.90  | 4.08  | 4.29  | 4.47  | 30        |
| 40        | 5.20  | 5.44  | 5.72  | 5.96  | 40        |
| 50        | 6.50  | 6.80  | 7.15  | 7.45  | 50        |
| 60        | 7.80  | 8.16  | 8.58  | 8.94  | 60        |
| 70        | 9.10  | 9.52  | 10.01 | 10.43 | 70        |
| 80        | 10.40 | 10.88 | 11.44 | 11.92 | 80        |
| 90        | 11.70 | 12.24 | 12.87 | 13.41 | 90        |
| 100       | 13.00 | 13.60 | 14.30 | 14.90 | 100       |

| <i>L.</i> | 4.5   | 4.6   | 4.7   | 4.8   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 1.56  | 1.63  | 1.70  | 1.78  | 10        |
| 20        | 3.12  | 3.26  | 3.40  | 3.56  | 20        |
| 30        | 4.68  | 4.89  | 5.10  | 5.34  | 30        |
| 40        | 6.24  | 6.52  | 6.80  | 7.12  | 40        |
| 50        | 7.80  | 8.15  | 8.50  | 8.90  | 50        |
| 60        | 9.36  | 9.78  | 10.20 | 10.68 | 60        |
| 70        | 10.92 | 11.41 | 11.90 | 12.46 | 70        |
| 80        | 12.48 | 13.04 | 13.60 | 14.24 | 80        |
| 90        | 14.04 | 14.67 | 15.30 | 16.02 | 90        |
| 100       | 15.60 | 16.30 | 17.00 | 17.80 | 100       |

*Supplement to table 5.—Correction of length average—Slope  $\frac{1}{2}$  to 1.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|----------------|
|                | 4.9           | 5.0   | 5.1   | 5.2   |                |
| 10             | 1.85          | 1.93  | 2.01  | 2.09  | 10             |
| 20             | 3.70          | 3.86  | 4.02  | 4.18  | 20             |
| 30             | 5.55          | 5.79  | 6.03  | 6.27  | 30             |
| 40             | 7.40          | 7.72  | 8.04  | 8.36  | 40             |
| 50             | 9.25          | 9.65  | 10.05 | 10.45 | 50             |
| 60             | 11.10         | 11.58 | 12.06 | 12.54 | 60             |
| 70             | 12.95         | 13.51 | 14.07 | 14.63 | 70             |
| 80             | 14.80         | 15.44 | 16.08 | 16.72 | 80             |
| 90             | 16.65         | 17.37 | 18.09 | 18.81 | 90             |
| 100            | 18.50         | 19.30 | 20.10 | 20.90 | 100            |

| <i>L.</i> | 5.3   | 5.4   | 5.5   | 5.6   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 2.17  | 2.25  | 2.33  | 2.42  | 10        |
| 20        | 4.34  | 4.50  | 4.66  | 4.84  | 20        |
| 30        | 6.51  | 6.75  | 6.99  | 7.26  | 30        |
| 40        | 8.68  | 9.00  | 9.32  | 9.68  | 40        |
| 50        | 10.85 | 11.25 | 11.65 | 12.10 | 50        |
| 60        | 13.02 | 13.50 | 13.98 | 14.52 | 60        |
| 70        | 15.19 | 15.75 | 16.31 | 16.94 | 70        |
| 80        | 17.36 | 18.00 | 18.64 | 19.36 | 80        |
| 90        | 19.53 | 20.25 | 20.97 | 21.78 | 90        |
| 100       | 21.70 | 22.50 | 23.30 | 24.20 | 100       |

| <i>L.</i> | 5.7   | 5.8   | 5.9   | 6.0   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 2.51  | 2.60  | 2.69  | 2.78  | 10        |
| 20        | 5.02  | 5.20  | 5.38  | 5.56  | 20        |
| 30        | 7.53  | 7.80  | 8.07  | 8.34  | 30        |
| 40        | 10.04 | 10.40 | 10.76 | 11.12 | 40        |
| 50        | 12.55 | 13.00 | 13.45 | 13.90 | 50        |
| 60        | 15.06 | 15.60 | 16.14 | 16.68 | 60        |
| 70        | 17.57 | 18.20 | 18.83 | 19.46 | 70        |
| 80        | 20.08 | 20.80 | 21.52 | 22.24 | 80        |
| 90        | 22.59 | 23.40 | 24.21 | 25.02 | 90        |
| 100       | 25.10 | 26.00 | 26.90 | 27.80 | 100       |



Supplement to table 5.—Correction of length average—Slope  
2½ to 1.

| Length. | Depth. |       |       |       | Length. |
|---------|--------|-------|-------|-------|---------|
|         | 6.1    | 6.2   | 6.3   | 6.4   |         |
| 10      | 2.87   | 2.97  | 3.06  | 3.16  | 10      |
| 20      | 5.74   | 5.94  | 6.12  | 6.32  | 20      |
| 30      | 8.61   | 8.91  | 9.18  | 9.48  | 30      |
| 40      | 11.48  | 11.88 | 12.24 | 12.64 | 40      |
| 50      | 14.35  | 14.85 | 15.30 | 15.80 | 50      |
| 60      | 17.22  | 17.82 | 18.36 | 18.96 | 60      |
| 70      | 20.09  | 20.79 | 21.42 | 22.12 | 70      |
| 80      | 22.96  | 23.76 | 24.48 | 25.28 | 80      |
| 90      | 25.83  | 26.73 | 27.54 | 28.44 | 90      |
| 100     | 28.70  | 29.70 | 30.60 | 31.60 | 100     |

| L.  | 6.5   | 6.6   | 6.7   | 6.8   | L.  |
|-----|-------|-------|-------|-------|-----|
| 10  | 3.26  | 3.36  | 3.46  | 3.57  | 10  |
| 20  | 6.52  | 6.72  | 6.92  | 7.14  | 20  |
| 30  | 9.78  | 10.08 | 10.38 | 10.71 | 30  |
| 40  | 13.04 | 13.44 | 13.84 | 14.28 | 40  |
| 50  | 16.30 | 16.80 | 17.30 | 17.85 | 50  |
| 60  | 19.56 | 20.16 | 20.76 | 21.42 | 60  |
| 70  | 22.82 | 23.52 | 24.22 | 24.99 | 70  |
| 80  | 26.08 | 26.88 | 27.68 | 28.56 | 80  |
| 90  | 29.34 | 30.24 | 31.14 | 32.13 | 90  |
| 100 | 32.60 | 33.60 | 34.60 | 35.70 | 100 |

| L.  | 6.9   | 7.0   | 7.1   | 7.2   | L.  |
|-----|-------|-------|-------|-------|-----|
| 10  | 3.67  | 3.76  | 3.89  | 4.00  | 10  |
| 20  | 7.34  | 7.56  | 7.78  | 8.00  | 20  |
| 30  | 11.01 | 11.34 | 11.67 | 12.00 | 30  |
| 40  | 14.68 | 15.12 | 15.56 | 16.00 | 40  |
| 50  | 18.35 | 18.90 | 19.45 | 20.00 | 50  |
| 60  | 22.02 | 22.68 | 23.34 | 24.00 | 60  |
| 70  | 25.69 | 26.46 | 27.23 | 28.00 | 70  |
| 80  | 29.36 | 30.24 | 31.12 | 32.00 | 80  |
| 90  | 33.03 | 34.02 | 35.01 | 36.00 | 90  |
| 100 | 36.70 | 37.80 | 38.90 | 40.00 | 100 |

*Supplement to table 5.—Correction of length average.—Slope  
2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|----------------|
|                | 7.3           | 7.4   | 7.5   | 7.6   |                |
| 10             | 4.11          | 4.23  | 4.34  | 4.46  | 10             |
| 20             | 8.22          | 8.46  | 8.68  | 8.92  | 20             |
| 30             | 12.33         | 12.69 | 13.02 | 13.38 | 30             |
| 40             | 16.44         | 16.92 | 17.36 | 17.84 | 40             |
| 50             | 20.55         | 21.15 | 21.70 | 22.30 | 50             |
| 60             | 24.66         | 25.38 | 26.04 | 26.76 | 60             |
| 70             | 28.77         | 29.61 | 30.38 | 31.22 | 70             |
| 80             | 32.88         | 33.84 | 34.72 | 35.68 | 80             |
| 90             | 36.99         | 38.07 | 39.06 | 40.14 | 90             |
| 100            | 41.10         | 42.30 | 43.40 | 44.60 | 100            |

| <i>L.</i> | 7.7   | 7.8   | 7.9   | 8.0   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 4.57  | 4.69  | 4.82  | 4.94  | 10        |
| 20        | 9.14  | 9.38  | 9.64  | 9.88  | 20        |
| 30        | 13.71 | 14.07 | 14.46 | 14.82 | 30        |
| 40        | 18.28 | 18.76 | 19.28 | 19.76 | 40        |
| 50        | 22.85 | 23.45 | 24.10 | 24.70 | 50        |
| 60        | 27.42 | 28.14 | 28.92 | 29.64 | 60        |
| 70        | 31.99 | 32.83 | 33.74 | 34.58 | 70        |
| 80        | 36.56 | 37.52 | 38.56 | 39.52 | 80        |
| 90        | 41.13 | 42.21 | 43.38 | 44.46 | 90        |
| 100       | 45.70 | 46.90 | 48.20 | 49.40 | 100       |

| <i>L.</i> | 8.1   | 8.2   | 8.3   | 8.4   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 5.06  | 5.19  | 5.32  | 5.44  | 10        |
| 20        | 10.12 | 10.38 | 10.64 | 10.88 | 20        |
| 30        | 15.18 | 15.57 | 15.96 | 16.32 | 30        |
| 40        | 20.24 | 20.76 | 21.28 | 21.76 | 40        |
| 50        | 25.30 | 25.95 | 26.60 | 27.20 | 50        |
| 60        | 30.36 | 31.14 | 31.92 | 32.64 | 60        |
| 70        | 35.42 | 36.33 | 37.24 | 38.08 | 70        |
| 80        | 40.48 | 41.52 | 42.56 | 43.52 | 80        |
| 90        | 45.54 | 46.71 | 47.88 | 48.96 | 90        |
| 100       | 50.60 | 51.90 | 53.20 | 54.40 | 100       |

*Supplement to table 5.—Corrections of length average.—Slope  
2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|----------------|
|                | 8.5           | 8.6   | 8.7   | 8.8   |                |
| 10             | 5.57          | 5.71  | 5.84  | 5.98  | 10             |
| 20             | 11.14         | 11.42 | 11.68 | 11.96 | 20             |
| 30             | 16.71         | 17.13 | 17.52 | 17.94 | 30             |
| 40             | 22.28         | 22.84 | 23.36 | 23.92 | 40             |
| 50             | 27.85         | 28.55 | 29.20 | 29.90 | 50             |
| 60             | 33.42         | 34.26 | 35.04 | 35.88 | 60             |
| 70             | 38.99         | 39.97 | 40.88 | 41.86 | 70             |
| 80             | 44.56         | 45.68 | 46.72 | 47.84 | 80             |
| 90             | 50.13         | 51.39 | 52.56 | 53.82 | 90             |
| 100            | 55.70         | 57.10 | 58.40 | 59.80 | 100            |

| <i>L.</i> | 8.9   | 9.0   | 9.1   | 9.2   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 6.11  | 6.25  | 6.39  | 6.53  | 10        |
| 20        | 12.22 | 12.50 | 12.78 | 13.06 | 20        |
| 30        | 18.33 | 18.75 | 19.17 | 19.59 | 30        |
| 40        | 24.44 | 25.00 | 25.56 | 26.12 | 40        |
| 50        | 30.55 | 31.25 | 31.95 | 32.65 | 50        |
| 60        | 36.66 | 37.50 | 38.34 | 39.18 | 60        |
| 70        | 42.77 | 43.75 | 44.73 | 45.71 | 70        |
| 80        | 48.88 | 50.00 | 51.12 | 52.24 | 80        |
| 90        | 54.99 | 56.25 | 57.51 | 58.77 | 90        |
| 100       | 61.10 | 62.50 | 63.90 | 65.30 | 100       |

| <i>L.</i> | 9.3   | 9.4   | 9.5   | 9.6   | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 6.67  | 6.82  | 6.96  | 7.11  | 10        |
| 20        | 13.34 | 13.64 | 13.92 | 14.22 | 20        |
| 30        | 20.01 | 20.46 | 20.88 | 21.33 | 30        |
| 40        | 26.68 | 27.28 | 27.84 | 28.44 | 40        |
| 50        | 33.35 | 34.10 | 34.80 | 35.55 | 50        |
| 60        | 40.02 | 40.92 | 41.76 | 42.66 | 60        |
| 70        | 46.69 | 47.74 | 48.72 | 49.77 | 70        |
| 80        | 53.36 | 54.56 | 55.68 | 56.88 | 80        |
| 90        | 60.03 | 61.38 | 62.64 | 63.99 | 90        |
| 100       | 66.70 | 68.20 | 69.60 | 71.10 | 100       |

*Supplement to table 5.—Corrections of length average.—Slope  
2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|----------------|
|                | 9.7           | 9.8   | 9.9   | 10.0  |                |
| 10             | 7.26          | 7.41  | 7.56  | 7.72  | 10             |
| 20             | 14.52         | 14.82 | 15.12 | 15.44 | 20             |
| 30             | 21.78         | 22.23 | 22.68 | 23.16 | 30             |
| 40             | 29.04         | 29.64 | 30.24 | 30.88 | 40             |
| 50             | 36.30         | 37.05 | 37.80 | 38.60 | 50             |
| 60             | 43.56         | 44.46 | 45.36 | 46.32 | 60             |
| 70             | 50.82         | 51.87 | 52.92 | 54.04 | 70             |
| 80             | 58.08         | 59.28 | 60.48 | 61.76 | 80             |
| 90             | 65.34         | 66.69 | 68.04 | 69.48 | 90             |
| 100            | 72.60         | 74.10 | 75.60 | 77.20 | 100            |

| <i>L.</i> | 10.1  | 10.2  | 10.3  | 10.4  | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 7.87  | 8.03  | 8.19  | 8.35  | 10        |
| 20        | 15.74 | 16.06 | 16.38 | 16.70 | 20        |
| 30        | 23.61 | 24.09 | 24.57 | 25.05 | 30        |
| 40        | 31.48 | 32.12 | 32.76 | 33.40 | 40        |
| 50        | 39.35 | 40.15 | 40.95 | 41.75 | 50        |
| 60        | 47.22 | 48.18 | 49.14 | 50.10 | 60        |
| 70        | 55.09 | 56.21 | 57.33 | 58.45 | 70        |
| 80        | 62.96 | 64.24 | 65.52 | 66.80 | 80        |
| 90        | 70.83 | 72.27 | 73.71 | 75.15 | 90        |
| 100       | 78.70 | 80.30 | 81.90 | 83.50 | 100       |

| <i>L.</i> | 10.5  | 10.6  | 10.7  | 10.8  | <i>L.</i> |
|-----------|-------|-------|-------|-------|-----------|
| 10        | 8.51  | 8.67  | 8.83  | 9.00  | 10        |
| 20        | 17.02 | 17.34 | 17.66 | 18.00 | 20        |
| 30        | 25.53 | 26.01 | 26.49 | 27.00 | 30        |
| 40        | 34.04 | 34.68 | 35.32 | 36.00 | 40        |
| 50        | 42.55 | 43.35 | 44.15 | 45.00 | 50        |
| 60        | 51.06 | 52.02 | 52.98 | 54.00 | 60        |
| 70        | 59.57 | 60.69 | 61.81 | 63.00 | 70        |
| 80        | 68.08 | 69.36 | 70.64 | 72.00 | 80        |
| 90        | 76.59 | 78.03 | 79.47 | 81.00 | 90        |
| 100       | 85.10 | 86.70 | 88.30 | 90.00 | 100       |

*Supplement to table 5.—Corrections of length average.—Slope  
2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |       |       |       | <i>Length.</i> |
|----------------|---------------|-------|-------|-------|----------------|
|                | 10.9          | 11.0  | 11.1  | 11.2  |                |
| 10             | 9.17          | 9.34  | 9.51  | 9.68  | 10             |
| 20             | 18.34         | 18.68 | 19.02 | 19.36 | 20             |
| 30             | 27.51         | 28.02 | 28.53 | 29.04 | 30             |
| 40             | 36.68         | 37.36 | 38.04 | 38.72 | 40             |
| 50             | 45.85         | 46.70 | 47.55 | 48.40 | 50             |
| 60             | 55.02         | 56.04 | 57.06 | 58.08 | 60             |
| 70             | 64.19         | 65.38 | 66.57 | 67.76 | 70             |
| 80             | 73.36         | 74.72 | 76.08 | 77.44 | 80             |
| 90             | 82.53         | 84.06 | 85.59 | 87.12 | 90             |
| 100            | 91.70         | 93.40 | 95.10 | 96.80 | 100            |

| <i>L.</i> | 11.3  | 11.4   | 11.5   | 11.6   | <i>L.</i> |
|-----------|-------|--------|--------|--------|-----------|
| 10        | 9.85  | 10.03  | 10.20  | 10.38  | 10        |
| 20        | 19.70 | 20.06  | 20.40  | 20.76  | 20        |
| 30        | 29.55 | 30.09  | 30.60  | 31.14  | 30        |
| 40        | 39.40 | 40.12  | 40.80  | 41.52  | 40        |
| 50        | 49.25 | 50.15  | 51.00  | 51.90  | 50        |
| 60        | 59.10 | 60.18  | 61.20  | 62.28  | 60        |
| 70        | 68.95 | 70.21  | 71.40  | 72.66  | 70        |
| 80        | 78.80 | 80.24  | 81.60  | 83.04  | 80        |
| 90        | 88.65 | 90.27  | 91.80  | 93.42  | 90        |
| 100       | 98.50 | 100.30 | 102.00 | 103.80 | 100       |

| <i>L.</i> | 11.7   | 11.8   | 11.9   | 12.0   | <i>L.</i> |
|-----------|--------|--------|--------|--------|-----------|
| 10        | 10.56  | 10.74  | 10.93  | 11.11  | 10        |
| 20        | 21.12  | 21.48  | 21.86  | 22.22  | 20        |
| 30        | 31.68  | 32.22  | 32.79  | 33.33  | 30        |
| 40        | 42.24  | 42.96  | 43.72  | 44.44  | 40        |
| 50        | 52.80  | 53.70  | 54.65  | 55.55  | 50        |
| 60        | 63.36  | 64.44  | 65.58  | 66.66  | 60        |
| 70        | 73.92  | 75.18  | 76.51  | 77.77  | 70        |
| 80        | 84.48  | 85.92  | 87.44  | 88.88  | 80        |
| 90        | 95.04  | 96.66  | 98.37  | 99.99  | 90        |
| 100       | 105.60 | 107.40 | 109.30 | 111.40 | 100       |

*Supplement to table 5.—Correction of length average.—Slope  
2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|----------------|
|                | 12.1          | 12.2   | 12.3   | 12.4   |                |
| 10             | 11.30         | 11.48  | 11.67  | 11.86  | 10             |
| 20             | 22.60         | 22.96  | 23.34  | 23.72  | 20             |
| 30             | 33.90         | 34.44  | 35.01  | 35.58  | 30             |
| 40             | 45.20         | 45.92  | 46.68  | 47.44  | 40             |
| 50             | 56.50         | 57.40  | 58.35  | 59.30  | 50             |
| 60             | 67.80         | 68.88  | 70.02  | 71.16  | 60             |
| 70             | 79.10         | 80.36  | 81.69  | 83.02  | 70             |
| 80             | 90.40         | 91.84  | 93.36  | 94.88  | 80             |
| 90             | 101.70        | 103.32 | 105.03 | 106.74 | 90             |
| 100            | 113.00        | 114.80 | 116.70 | 118.60 | 100            |

| <i>L.</i> | 12.5   | 12.6   | 12.7   | 12.8   | <i>L.</i> |
|-----------|--------|--------|--------|--------|-----------|
| 10        | 12.06* | 12.25  | 12.45  | 12.64  | 10        |
| 20        | 24.12  | 24.50  | 24.90  | 25.28  | 20        |
| 30        | 36.18  | 36.75  | 37.35  | 37.92  | 30        |
| 40        | 48.24  | 49.00  | 49.80  | 50.56  | 40        |
| 50        | 60.30  | 61.25  | 62.25  | 63.20  | 50        |
| 60        | 72.36  | 73.50  | 74.70  | 75.84  | 60        |
| 70        | 84.42  | 85.75  | 87.15  | 88.48  | 70        |
| 80        | 96.48  | 98.00  | 99.60  | 101.12 | 80        |
| 90        | 108.54 | 110.25 | 112.05 | 113.76 | 90        |
| 100       | 120.60 | 122.50 | 124.50 | 126.40 | 100       |

| <i>L.</i> | 12.9   | 13.0   | 13.1   | 13.2   | <i>L.</i> |
|-----------|--------|--------|--------|--------|-----------|
| 10        | 12.84  | 13.04  | 13.24  | 13.44  | 10        |
| 20        | 25.68  | 26.08  | 26.48  | 26.88  | 20        |
| 30        | 38.52  | 39.12  | 39.72  | 40.32  | 30        |
| 40        | 51.36  | 52.16  | 52.96  | 53.76  | 40        |
| 50        | 64.20  | 65.20  | 66.20  | 67.20  | 50        |
| 60        | 77.04  | 78.24  | 79.44  | 80.64  | 60        |
| 70        | 89.88  | 91.28  | 92.68  | 94.08  | 70        |
| 80        | 102.72 | 104.32 | 105.92 | 107.52 | 80        |
| 90        | 115.56 | 117.36 | 119.16 | 120.96 | 90        |
| 100       | 128.40 | 130.40 | 132.40 | 134.40 | 100       |

Supplement to table 5.—Correction of length average.—Slope  
2½ to 1.

| Length. | Depth. |        |        |        | Length. |
|---------|--------|--------|--------|--------|---------|
|         | 13.3   | 13.4   | 13.5   | 13.6   |         |
| 10      | 13.65  | 13.85  | 14.06  | 14.27  | 10      |
| 20      | 27.30  | 27.70  | 28.12  | 28.54  | 20      |
| 30      | 40.95  | 41.55  | 42.18  | 42.81  | 30      |
| 40      | 54.60  | 55.40  | 56.24  | 57.08  | 40      |
| 50      | 68.25  | 69.25  | 70.30  | 71.35  | 50      |
| 60      | 81.90  | 83.10  | 84.36  | 85.62  | 60      |
| 70      | 95.55  | 96.95  | 98.42  | 99.89  | 70      |
| 80      | 109.20 | 110.80 | 112.48 | 114.16 | 80      |
| 90      | 122.85 | 124.65 | 126.54 | 128.43 | 90      |
| 100     | 136.50 | 138.50 | 140.60 | 142.70 | 100     |

| L.  | 13.7   | 13.8   | 13.9   | 14.0   | L.  |
|-----|--------|--------|--------|--------|-----|
| 10  | 14.48  | 14.69  | 14.91  | 15.12  | 10  |
| 20  | 28.96  | 29.38  | 29.82  | 30.24  | 20  |
| 30  | 43.44  | 44.07  | 44.73  | 45.36  | 30  |
| 40  | 57.92  | 58.76  | 59.64  | 60.48  | 40  |
| 50  | 72.40  | 73.45  | 74.55  | 75.60  | 50  |
| 60  | 86.88  | 88.14  | 89.46  | 90.72  | 60  |
| 70  | 101.36 | 102.83 | 104.37 | 105.84 | 70  |
| 80  | 115.84 | 117.52 | 119.28 | 120.96 | 80  |
| 90  | 130.32 | 132.21 | 134.19 | 136.08 | 90  |
| 100 | 144.80 | 146.90 | 149.10 | 151.20 | 100 |

| L.  | 14.1   | 14.2   | 14.3   | 14.4   | L.  |
|-----|--------|--------|--------|--------|-----|
| 10  | 15.34  | 15.56  | 15.78  | 16.00  | 10  |
| 20  | 30.68  | 31.12  | 31.56  | 32.00  | 20  |
| 30  | 46.02  | 46.68  | 47.34  | 48.00  | 30  |
| 40  | 61.36  | 62.24  | 63.12  | 64.00  | 40  |
| 50  | 76.70  | 77.80  | 78.90  | 80.00  | 50  |
| 60  | 92.04  | 93.36  | 94.68  | 96.00  | 60  |
| 70  | 107.38 | 108.92 | 110.46 | 112.00 | 70  |
| 80  | 122.72 | 124.48 | 126.24 | 128.00 | 80  |
| 90  | 138.06 | 140.04 | 142.02 | 144.00 | 90  |
| 100 | 153.40 | 155.60 | 157.80 | 160.00 | 100 |

*Supplement to Table V.—Correction of Length Average.—  
Slope 2½ to 1.*

| <i>Length.</i> | <i>Depth.</i> |        |        |        | <i>Length.</i> |
|----------------|---------------|--------|--------|--------|----------------|
|                | 14.5          | 14.6   | 14.7   | 14.8   |                |
| 10             | 16.22         | 16.45  | 16.67  | 16.90  | 10             |
| 20             | 32.44         | 32.90  | 33.34  | 33.80  | 20             |
| 30             | 48.66         | 49.35  | 50.01  | 50.70  | 30             |
| 40             | 64.88         | 65.80  | 66.68  | 67.60  | 40             |
| 50             | 81.10         | 82.25  | 83.35  | 84.50  | 50             |
| 60             | 97.32         | 98.70  | 100.02 | 101.40 | 60             |
| 70             | 113.54        | 115.15 | 116.69 | 118.30 | 70             |
| 80             | 129.76        | 131.60 | 133.36 | 135.20 | 80             |
| 90             | 145.98        | 148.05 | 150.03 | 152.10 | 90             |
| 100            | 162.20        | 164.50 | 166.70 | 169.00 | 100            |

| <i>L.</i> | 14.9   | 15.0   | 15.1   | 15.2   | <i>L.</i> |
|-----------|--------|--------|--------|--------|-----------|
| 10        | 17.13  | 17.36  | 17.59  | 17.83  | 10        |
| 20        | 34.26  | 34.72  | 35.18  | 35.66  | 20        |
| 30        | 51.39  | 52.08  | 52.77  | 53.49  | 30        |
| 40        | 68.52  | 69.44  | 70.36  | 71.32  | 40        |
| 50        | 85.65  | 86.80  | 87.95  | 89.15  | 50        |
| 60        | 102.78 | 104.16 | 105.54 | 106.98 | 60        |
| 70        | 119.91 | 121.52 | 123.13 | 124.81 | 70        |
| 80        | 137.04 | 138.88 | 140.72 | 142.64 | 80        |
| 90        | 154.17 | 156.24 | 158.31 | 160.47 | 90        |
| 100       | 171.30 | 173.60 | 175.90 | 178.30 | 100       |

| <i>L.</i> | 15.3   | 15.4   | 15.5   | 15.6   | <i>L.</i> |
|-----------|--------|--------|--------|--------|-----------|
| 10        | 18.06  | 18.30  | 18.54  | 18.78  | 10        |
| 20        | 36.12  | 36.60  | 37.08  | 37.56  | 20        |
| 30        | 54.18  | 54.90  | 55.62  | 56.34  | 30        |
| 40        | 72.24  | 73.20  | 74.16  | 75.12  | 40        |
| 50        | 90.30  | 91.50  | 92.70  | 93.90  | 50        |
| 60        | 108.36 | 109.80 | 111.24 | 112.68 | 60        |
| 70        | 126.42 | 128.10 | 129.78 | 131.46 | 70        |
| 80        | 144.48 | 146.40 | 148.32 | 150.24 | 80        |
| 90        | 162.54 | 164.70 | 166.86 | 169.02 | 90        |
| 100       | 180.60 | 183.00 | 185.40 | 187.80 | 100       |



*Table VI.—Embankment.—Roadway 14 feet wide.—Side  
Slopes 1½ to 1.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|----------------|------------------|
|                |                  | 20.0           | 3259             | 40.0           | 10963            |
| 0.5            | 27               | .5             | 3398             | .5             | 11212            |
| 1.0            | 57               | 21.0           | 3539             | 41.0           | 11465            |
| .5             | 90               | .5             | 3683             | .5             | 11720            |
| 2.0            | 126              | 22.0           | 3830             | 42.0           | 11978            |
| .5             | 164              | .5             | 3979             | .5             | 12238            |
| 3.0            | 206              | 23.0           | 4131             | 43.0           | 12502            |
| .5             | 250              | .5             | 4287             | .5             | 12768            |
| 4.0            | 296              | 24.0           | 4444             | 44.0           | 13037            |
| .5             | 346              | .5             | 4605             | .5             | 13309            |
| 5.0            | 398              | 25.0           | 4768             | 45.0           | 13583            |
| .5             | 453              | .5             | 4935             | .5             | 13861            |
| 6.0            | 511              | 26.0           | 5104             | 46.0           | 14141            |
| .5             | 572              | .5             | 5275             | .5             | 14424            |
| 7.0            | 635              | 27.0           | 5450             | 47.0           | 14709            |
| .5             | 701              | .5             | 5627             | .5             | 14998            |
| 8.0            | 770              | 28.0           | 5807             | 48.0           | 15289            |
| .5             | 842              | .5             | 5990             | .5             | 15583            |
| 9.0            | 917              | 29.0           | 6176             | 49.0           | 15880            |
| .5             | 994              | .5             | 6364             | .5             | 16179            |
| 10.0           | 1074             | 30.0           | 6555             | 50.0           | 16481            |
| .5             | 1157             | .5             | 6749             | .5             | 16787            |
| 11.0           | 1243             | 31.0           | 6946             | 51.0           | 17094            |
| .5             | 1331             | .5             | 7146             | .5             | 17405            |
| 12.0           | 1422             | 32.0           | 7348             | 52.0           | 17719            |
| .5             | 1516             | .5             | 7553             | .5             | 18035            |
| 13.0           | 1613             | 33.0           | 7761             | 53.0           | 18354            |
| .5             | 1713             | .5             | 7972             | .5             | 18675            |
| 14.0           | 1815             | 34.0           | 8185             | 54.0           | 19000            |
| .5             | 1920             | .5             | 8401             | .5             | 19327            |
| 15.0           | 2028             | 35.0           | 8620             | 55.0           | 19657            |
| .5             | 2138             | .5             | 8842             | .5             | 19990            |
| 16.0           | 2252             | 36.0           | 9067             | 56.0           | 20326            |
| .5             | 2368             | .5             | 9294             | .5             | 20664            |
| 17.0           | 2487             | 37.0           | 9524             | 57.0           | 21006            |
| .5             | 2609             | .5             | 9757             | .5             | 21350            |
| 18.0           | 2733             | 38.0           | 9993             | 58.0           | 21696            |
| .5             | 2861             | .5             | 10231            | .5             | 22046            |
| 19.0           | 2991             | 39.0           | 10472            | 59.0           | 22398            |
| .5             | 3124             | .5             | 10716            | .5             | 22753            |

**Table VII.—Embankment.—Roadway 15 feet wide.—Side  
Slopes 1½ to**

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|----------------|------------------|
|                |                  | 20.0           | 3333             | 40.0           | 11111            |
| 0.5            | 29               | .5             | 3474             | .5             | 11362            |
| 1.0            | 61               | 21.0           | 3617             | 41.0           | 11617            |
| .5             | 96               | .5             | 3762             | .5             | 11874            |
| 2.0            | 133              | 22.0           | 3911             | 42.0           | 12133            |
| .5             | 174              | .5             | 4063             | .5             | 12396            |
| 3.0            | 217              | 23.0           | 4217             | 43.0           | 12661            |
| .5             | 262              | .5             | 4374             | .5             | 12929            |
| 4.0            | 311              | 24.0           | 4533             | 44.0           | 13200            |
| .5             | 363              | .5             | 4696             | .5             | 13474            |
| 5.0            | 417              | 25.0           | 4861             | 45.0           | 13750            |
| .5             | 474              | .5             | 5029             | .5             | 14029            |
| 6.0            | 533              | 26.0           | 5200             | 46.0           | 14311            |
| .5             | 596              | .5             | 5374             | .5             | 14596            |
| 7.0            | 661              | 27.0           | 5550             | 47.0           | 14883            |
| .5             | 729              | .5             | 5729             | .5             | 15174            |
| 8.0            | 800              | 28.0           | 5911             | 48.0           | 15467            |
| .5             | 874              | .5             | 6096             | .5             | 15763            |
| 9.0            | 950              | 29.0           | 6283             | 49.0           | 16061            |
| .5             | 1029             | .5             | 6474             | .5             | 16363            |
| 10.0           | 1111             | 30.0           | 6667             | 50.0           | 16667            |
| .5             | 1196             | .5             | 6862             | .5             | 16974            |
| 11.0           | 1283             | 31.0           | 7061             | 51.0           | 17283            |
| .5             | 1374             | .5             | 7263             | .5             | 17596            |
| 12.0           | 1467             | 32.0           | 7467             | 52.0           | 17911            |
| .5             | 1562             | .5             | 7674             | .5             | 18229            |
| 13.0           | 1661             | 33.0           | 7883             | 53.0           | 18550            |
| .5             | 1763             | .5             | 8096             | .5             | 18874            |
| 14.0           | 1867             | 34.0           | 8311             | 54.0           | 19200            |
| .5             | 1974             | .5             | 8529             | .5             | 19529            |
| 15.0           | 2083             | 35.0           | 8750             | 55.0           | 19861            |
| .5             | 2196             | .5             | 8974             | .5             | 20196            |
| 16.0           | 2311             | 36.0           | 9200             | 56.0           | 20533            |
| .5             | 2429             | .5             | 9429             | .5             | 20874            |
| 17.0           | 2550             | 37.0           | 9661             | 57.0           | 21217            |
| .5             | 2674             | .5             | 9896             | .5             | 21562            |
| 18.0           | 2800             | 38.0           | 10133            | 58.0           | 21911            |
| .5             | 2929             | .5             | 10374            | .5             | 22263            |
| 19.0           | 3061             | 39.0           | 10617            | 59.0           | 22617            |
| .5             | 3196             | .5             | 10862            | .5             | 22974            |

*Table VIII.—Excavation.—Roadway 20 feet wide.—Side  
Slopes 1½ to 1.*

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|----------------|------------------|
|                |                  | 20.0           | 3333             | 40.0           | 10370            |
| 0.5            | 38               | .5             | 3464             | .5             | 10594            |
| 1.0            | 79               | 21.0           | 3597             | 41.0           | 10819            |
| .5             | 122              | .5             | 3733             | .5             | 11047            |
| 2.0            | 167              | 22.0           | 3870             | 42.0           | 11278            |
| .5             | 214              | .5             | 4010             | .5             | 11510            |
| 3.0            | 264              | 23.0           | 4153             | 43.0           | 11745            |
| .5             | 316              | .5             | 4297             | .5             | 11983            |
| 4.0            | 370              | 24.0           | 4444             | 44.0           | 12222            |
| .5             | 427              | .5             | 4594             | .5             | 12464            |
| 5.0            | 486              | 25.0           | 4745             | 45.0           | 12708            |
| .5             | 547              | .5             | 4899             | .5             | 12955            |
| 6.0            | 611              | 26.0           | 5056             | 46.0           | 13204            |
| .5             | 677              | .5             | 5214             | .5             | 13455            |
| 7.0            | 745              | 27.0           | 5375             | 47.0           | 13708            |
| .5             | 816              | .5             | 5538             | .5             | 13964            |
| 8.0            | 889              | 28.0           | 5704             | 48.0           | 14222            |
| .5             | 964              | .5             | 5872             | .5             | 14483            |
| 9.0            | 1042             | 29.0           | 6042             | 49.0           | 14745            |
| .5             | 1122             | .5             | 6214             | .5             | 15010            |
| 10.0           | 1204             | 30.0           | 6389             | 50.0           | 15278            |
| .5             | 1288             | .5             | 6566             | .5             | 15547            |
| 11.0           | 1375             | 31.0           | 6745             | 51.0           | 15819            |
| .5             | 1464             | .5             | 6927             | .5             | 16094            |
| 12.0           | 1556             | 32.0           | 7111             | 52.0           | 16370            |
| .5             | 1649             | .5             | 7297             | .5             | 16649            |
| 13.0           | 1745             | 33.0           | 7486             | 53.0           | 16931            |
| .5             | 1844             | .5             | 7677             | .5             | 17214            |
| 14.0           | 1944             | 34.0           | 7870             | 54.0           | 17500            |
| .5             | 2047             | .5             | 8066             | .5             | 17788            |
| 15.0           | 2153             | 35.0           | 8264             | 55.0           | 18079            |
| .5             | 2260             | .5             | 8464             | .5             | 18372            |
| 16.0           | 2370             | 36.0           | 8667             | 56.0           | 18667            |
| .5             | 2483             | .5             | 8872             | .5             | 18964            |
| 17.0           | 2597             | 37.0           | 9079             | 57.0           | 19264            |
| .5             | 2714             | .5             | 9288             | .5             | 19566            |
| 18.0           | 2833             | 38.0           | 9500             | 58.0           | 19870            |
| .5             | 2955             | .5             | 9714             | .5             | 20177            |
| 19.0           | 3079             | 39.0           | 9931             | 59.0           | 20486            |
| .5             | 3205             | .5             | 10149            | .5             | 20797            |

**Table IX.—Excavation.—Roadway 22 feet wide.—Side Slopes  $\frac{1}{4}$  to**

| <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> | <i>Depths.</i> | <i>Contents.</i> |
|----------------|------------------|----------------|------------------|----------------|------------------|
|                |                  | 20.0           | 3481             | 40.0           | 10666            |
| 0.5            | 42               | .5             | 3616             | .5             | 10894            |
| 1.0            | 86               | 21.0           | 3753             | 41.0           | 11123            |
| .5             | 133              | .5             | 3892             | .5             | 11355            |
| 2.0            | 181              | 22.0           | 4033             | 42.0           | 11589            |
| .5             | 233              | .5             | 4177             | .5             | 11825            |
| 3.0            | 286              | 23.0           | 4323             | 43.0           | 12064            |
| .5             | 342              | .5             | 4472             | .5             | 12305            |
| 4.0            | 400              | 24.0           | 4622             | 44.0           | 12548            |
| .5             | 460              | .5             | 4775             | .5             | 12794            |
| 5.0            | 523              | 25.0           | 4931             | 45.0           | 13042            |
| .5             | 588              | .5             | 5088             | .5             | 13292            |
| 6.0            | 656              | 26.0           | 5248             | 46.0           | 13544            |
| .5             | 725              | .5             | 5410             | .5             | 13799            |
| 7.0            | 797              | 27.0           | 5575             | 47.0           | 14056            |
| .5             | 872              | .5             | 5742             | .5             | 14316            |
| 8.0            | 948              | 28.0           | 5911             | 48.0           | 14578            |
| .5             | 1027             | .5             | 6083             | .5             | 14842            |
| 9.0            | 1108             | 29.0           | 6256             | 49.0           | 15108            |
| .5             | 1192             | .5             | 6433             | .5             | 15377            |
| 10.0           | 1278             | 30.0           | 6611             | 50.0           | 15648            |
| .5             | 1366             | .5             | 6792             | .5             | 15922            |
| 11.0           | 1456             | 31.0           | 6975             | 51.0           | 16197            |
| .5             | 1549             | .5             | 7160             | .5             | 16475            |
| 12.0           | 1644             | 32.0           | 7348             | 52.0           | 16756            |
| .5             | 1742             | .5             | 7538             | .5             | 17038            |
| 13.0           | 1842             | 33.0           | 7731             | 53.0           | 17323            |
| .5             | 1944             | .5             | 7925             | .5             | 17610            |
| 14.0           | 2048             | 34.0           | 8122             | 54.0           | 17900            |
| .5             | 2155             | .5             | 8322             | .5             | 18192            |
| 15.0           | 2264             | 35.0           | 8523             | 55.0           | 18486            |
| .5             | 2375             | .5             | 8727             | .5             | 18783            |
| 16.0           | 2489             | 36.0           | 8933             | 56.0           | 19081            |
| .5             | 2605             | .5             | 9142             | .5             | 19383            |
| 17.0           | 2723             | 37.0           | 9353             | 57.0           | 19686            |
| .5             | 2844             | .5             | 9566             | .5             | 19992            |
| 18.0           | 2967             | 38.0           | 9781             | 58.0           | 20300            |
| .5             | 3092             | .5             | 9999             | .5             | 20610            |
| 19.0           | 3219             | 39.0           | 10219            | 59.0           | 20923            |
| .5             | 3349             | .5             | 10442            | .5             | 21238            |

